WAC 172-150-010 through 172-150-190 Repealed. See Disposition Table at beginning of this chapter.

Chapter 172-158 WAC

OFF-CAMPUS LIVING

WAC 172-158-020 Repealed.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

WAC 172-158-020 through 172-180-040 Repealed. See Disposition Table at beginning of this chapter.

Chapter 172-180 WAC

DELEGATED AUTHORIZATION TO HIRE, DISMISS AND DISCIPLINE CLASSIFIED PERSONNEL

WAC 172-180-010 through 172-180-040 Repealed.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

WAC 172-180-010 Introduction and purpose. [Statutory Authority: RCW 28B.35.120 and 43.21C.120. 86-01-042 (Order 85-01), § 172-180-010, filed 12/13/85. Statutory Authority: RCW 28B.35.120 and 43.21C.120. 82-22-078 (Order 82-04), § 172-180-010, filed 11/3/82. Statutory Authority: RCW 28B.40.120(11). 78-06-006 (Resolution No. 78-2), § 172-180-010, filed 5/5/78. Order 73-7, § 172-180-010, filed 3/20/73.] Repealed by 87-16-041 (Order 87-01), filed 7/29/87. Statutory Authority: RCW 28B.35.120 and 43.21C.120.


WAC 172-180-030 Scope of powers delegated to appointing authorities. [Statutory Authority: RCW 28B.35.120 and 43.21C.120. 86-01-042 (Order 85-01), § 172-180-030, filed 5/5/78. Order 73-7, § 172-180-030, filed 3/20/73.] Repealed by 87-16-041 (Order 87-01), filed 7/29/87. Statutory Authority: RCW 28B.35.120 and 43.21C.120.

WAC 172-180-040 Effective date. [Statutory Authority: RCW 28B.35.120 and 43.21C.120. 86-01-042 (Order 85-01), § 172-180-040, filed 12/13/85. Statutory Authority: RCW 28B.35.120 and 43.21C.120. 82-22-078 (Order 82-04), § 172-180-040, filed 11/3/82. Statutory Authority: RCW 28B.40.120(11). 78-06-006 (Resolution No. 78-2), § 172-180-040, filed 5/5/78. Order 73-7, § 172-180-040, filed 3/20/73.] Repealed by 87-16-041 (Order 87-01), filed 7/29/87. Statutory Authority: RCW 28B.35.120 and 43.21C.120.

WAC 172-180-010 through 172-180-040 Repealed. See Disposition Table at beginning of this chapter.

Title 173 WAC

ECOLOGY, DEPARTMENT OF

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173-15 Permits for oil or natural gas exploration activities conducted from state marine waters.
173-17 Shoreline Management Act enforcement regulations.
173-18 Shoreline Management Act—Streams and rivers constituting shorelines of the state.
173-22 Adoption of designations of wetlands associated with shorelines of the state.
173-60 Maximum environmental noise levels.
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173-100 Ground water management areas and programs.
173-124 Quincy ground water management subarea and zones.
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173-132 Duck Lake ground water management subarea.
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173-145 Administration of the flood control assistance account program.

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173-501 Instream resources protection program—Nooksack water resource inventory area (WRIA) 1.

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173-522 Water resources program in the Chehalis River basin, WRIA–22 and 23.

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173-563 Instream resources protection program for the main stem Columbia River in Washington state.
173-590 Procedures relating to the reservation of water for future public water supply.
173-591 Reservation of future public water supply for Thurston County.
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173-596 Procedures and policies governing appropriations of significant amounts of water for agricultural irrigation use.

Chapter 173-14 WAC

PERMITS FOR DEVELOPMENTS ON SHORELINES OF THE STATE

WAC

173-14-030 Definitions.
173-14-055 Nonconforming development standards.
173-14-060 Time requirements of permit.
173-14-180 Repealed.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-14-180 Regulatory orders by local government or the department. [Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-14-180, filed 5/23/86. Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-027 (Order DE 80-42), § 173-14-180, filed 2/2/81. Statutory Authority: RCW 90.58.200. 78-07-011 (Order DE 78-7), § 173-14-180, filed 6/14/78; Order DE 76-17, § 173-14-180, filed 7/27/76; Order DE 75-22, § 173-14-180, filed 10/16/75.] Repealed by 87-16-101 (Order DE 87-16-101).

WAC 173-14-030 Definitions. The following definitions shall apply:

(1) "Act" means chapter 286, Laws of 1971 ex. sess., chapter 90.58 RCW, the Shoreline Management Act of 1971, as amended;

(2) "Applicable master program" means the master program approved or adopted by the department pursuant to RCW 90.58.090 or 90.58.190 prior to issuance of the permit by local government;

(3) "Average grade level" means the average of the natural or existing topography of the portion of the lot, parcel, or tract of real property which will be directly under the proposed building or structure: Provided, That in the case of structures to be built over water, average grade level shall be the elevation of ordinary high water.

Calculation of the average grade level shall be made by averaging the elevations at the center of all exterior walls of the proposed building or structure;

(4) "Conditional use" means a use, development, or substantial development which is classified as a conditional use or is not classified within the applicable master program;

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

(6) "Exempt" developments are those set forth in WAC 173-14-040 which do not meet the definition of substantial development under RCW 90.58.030 (3)(e);

(7) "Fair market value" of a development is the expected price at which the development can be sold to a willing buyer. For developments which involve nonstructural operations such as dredging, drilling, dumping, or filling, the fair market value is the expected cost of hiring a contractor to perform the operation or where no such value can be calculated, the total of labor, equipment use, transportation, and other costs incurred for the duration of the permitted project;

(8) "Final order" includes the approval or disapproval of a permit, or a letter of exemption as set forth in WAC 173-14-115;

(9) "Height" is measured from average grade level to the highest point of a structure: Provided, That television antennas, chimneys, and similar appurtenances shall not be used in calculating height, except where it obstructs the view of a substantial number of residences on areas adjoining such shorelines, or the applicable master program provides otherwise: Provided further, That temporary construction equipment is excluded in this calculation;

(10) "Local government" means any county, incorporated city, or town which contains within its boundaries any lands or waters subject to this chapter;

(11) "Natural or existing topography" means the topography of the lot, parcel, or tract of real property immediately prior to any site preparation or grading, including excavation or filling;

(12) "Party of record" includes all persons who have notified local government of their desire to receive a copy of the final order on a permit under WAC 173-14-070;

(13) "Permit" means any substantial development, variance, conditional use permit, or revision authorized under chapter 90.58 RCW;

(14) "Public interest" means the interest shared by the citizens of the state or community at large in the affairs of government, or some interest by which their rights or liabilities are affected such as an effect on public property or on health, safety, or general welfare resulting from a use or development;

(15) "Structure" means a permanent or temporary edifice or building, or any piece of work artificially built or composed of parts joined together in some definite manner, whether installed on, above, or below the surface of the ground or water, except for vessels;

(16) "Transmit" means to send from one person or place to another by mail or hand delivery. The date of transmittal for mailed items is the date that the department's final order is certified for mailing or, for hand-delivered items, is the date of receipt at the destination; and

(17) "Variance" is a means to grant relief from the specific bulk, dimensional or performance standards set forth in the applicable master program and not a means to vary a use of a shoreline;

(18) "Vessel" includes ships, boats, barges, or any other floating craft which are designed and used for
navigation and do not interfere with the normal public use of the water.

(19) The definitions and concepts set forth in RCW 90.58.030 also apply as used herein.


WAC 173-14-055 Nonconforming development standards. Where nonconforming development standards do not exist in the applicable master program, the following definitions and standards shall apply:

(1) "Nonconforming development" means a shoreline use or structure which was lawfully constructed or established prior to the effective date of the act or the applicable master program, or amendments thereto, but which does not conform to present regulations or standards of the program or policies of the act;

(2) Nonconforming development may be continued provided that it is not enlarged, intensified, increased, or altered in any way which increases its nonconformity;

(3) A nonconforming development which is moved any distance must be brought into conformance with the applicable master program and the act;

(4) If a nonconforming development is damaged to an extent not exceeding seventy-five percent replacement cost of the original structure, it may be reconstructed to those configurations existing immediately prior to the time the structure was damaged, so long as restoration is completed within one year of the date of damage;

(5) If a nonconforming use is discontinued for twelve consecutive months or for twelve months during any two-year period, any subsequent use shall be conforming. It shall not be necessary to show that the owner of the property intends to abandon such nonconforming use in order for the nonconforming rights to expire;

(6) A nonconforming use shall not be changed to another nonconforming use, regardless of the conforming or nonconforming status of the building or structure in which it is housed; and

(7) An undeveloped lot, tract, parcel, site, or division which was established prior to the effective date of the act or the applicable master program but which does not conform to the present lot size or density standards may be developed so long as such development conforms to other requirements of the applicable master program and the act.


WAC 173-14-060 Time requirements of permit. The following time requirements shall apply to all permits:

(1) Substantial progress toward completion of a permitted activity shall be undertaken within two years after the approval of the permit by local government.

Substantial progress shall include all of the following, where applicable: The making of contracts; signing of notice to proceed; completion of grading and excavation; and the laying of major utilities; or, where no construction is involved, commencement of the activity: Provided, That local government may authorize a single extension before the end of the time limit, with prior notice to parties of record and the department, for up to one year based on reasonable factors.

(2) Permit authorization shall terminate within five years after the approval of the permit by local government: Provided, That local government may authorize a single extension before the end of the time limit, with prior notice to parties of record and the department, for up to one year based on reasonable factors.

(3) The running of a permit time period shall not include the time during which an activity was not actually pursued due to the pendency of reasonably related administrative appeals or litigation.

(4) Local government may issue permits with a fixed termination date of less than five years.

(5) When permit approval is based on conditions, such conditions shall be satisfied prior to occupancy or use of a structure or prior to commencement of a nonstructural activity: Provided, That an alternative compliance limit may be specified in the permit.

(6) Revisions to permits under WAC 173–14–064 may be authorized after original permit authorization has expired under subsection (2) of this section: Provided, That this procedure shall not be used to extend the original permit time requirements.


WAC 173–14–180 Repealed. See Disposition Table at beginning of this chapter.

Chapter 173–15 WAC

PERMITS FOR OIL OR NATURAL GAS EXPLORATION ACTIVITIES CONDUCTED FROM STATE MARINE WATERS


DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER


WAC 173–15–040 Repealed. See Disposition Table at beginning of this chapter.
Chapter 173-17 WAC
SHORELINE MANAGEMENT ACT
ENFORCEMENT REGULATIONS

WAC
173-17-010 Authority and purpose.
173-17-020 Definitions.
173-17-030 Policy.
173-17-040 Order to cease and desist.
173-17-050 Civil penalty.
173-17-060 Appeal of civil penalty.
173-17-070 Criminal penalty.
173-17-080 Oil or natural gas exploration—Penalty.

WAC 173-17-010 Authority and purpose. This regulation is adopted under RCW 90.58.200 and 90.58.210 to implement the enforcement responsibilities of the department and local government under the Shoreline Management Act. The act calls for a cooperative program between local government and the state. It provides for a variety of means of enforcement, including civil and criminal penalties, orders to cease and desist, orders to take corrective action, and permit rescission. The following should be used in addition to other mechanisms already in place at the local level and does not preclude other means of enforcement.

WAC 173-17-020 Definitions. The following definitions shall apply:
(1) "Act" means the Shoreline Management Act, chapter 90.58 RCW, as amended;
(2) "Department" means the department of ecology;
(3) "Development" means a use consisting of the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removal of any sand, gravel, or minerals; bulkheading; driving of piling; placing of obstructions; or any project of a permanent or temporary nature which interferes with the normal public use of the surface of the waters overlying lands subject to the act at any stage of water level;
(4) "Exemption" means authorization from local government which establishes that an activity is exempt from substantial development permit requirements under WAC 173-14-040, but subject to regulations of the act and the local master program;
(5) "Local government" means any county, incorporated city or town which contains within its boundaries any lands or waters subject to the act;
(6) "Permit" means any form of permission required under the act prior to undertaking activity on shorelines of the state, including substantial development permits, variances, conditional use permits, permits for oil or natural gas exploration activities, permission which may be required for selective commercial timber harvesting, and shoreline exemptions; and
(7) "Person" means any individual, partnership, corporation, association, organization, cooperative, public or municipal corporation, agency of the state, or local government unit, however designated.

WAC 173-17-030 Policy. These regulations should be used by local government in carrying out enforcement responsibilities under the act, unless local government adopts separate rules to implement the act's enforcement provision.

Enforcement action by the department or local government may be taken whenever a person has violated any provision of the act or any master program or other regulation promulgated under the act. The choice of enforcement action and the severity of any penalty should be based on the nature of the violation, the damage or risk to the public or to public resources, and/or the existence or degree of bad faith of the persons subject to the enforcement action.

WAC 173-17-040 Order to cease and desist. Local government and/or the department shall have the authority to serve upon a person a cease and desist order if an activity being undertaken on shorelines of the state is in violation of chapter 90.58 RCW or the local master plan.

(1) Content of order. The order shall set forth and contain:
(a) A description of the specific nature, extent, and time of violation and the damage or potential damage; and
(b) A notice that the violation or the potential violation cease and desist or, in appropriate cases, the specific corrective action to be taken within a given time. A civil penalty may be issued with the order.

(2) Effective date. The cease and desist order issued under this section shall become effective immediately upon receipt by the person to whom the order is directed.

(3) Compliance. Failure to comply with the terms of a cease and desist order issued under these regulations can result in enforcement actions including, but not limited to, the issuance of a civil penalty.

WAC 173-17-050 Civil penalty. A person who fails to conform to the terms of a permit issued under RCW 90.58.140, who undertakes a development or use on shorelines of the state without first obtaining a permit, or who fails to comply with a cease and desist order issued under these regulations may be subject to a civil penalty.

(1) Amount of penalty. The penalty shall not exceed one thousand dollars for each violation. Each day of violation shall constitute a separate violation.

(2) Aiding or abetting. Any person who, through an act of commission or omission procures, aids or abets in the violation shall be considered to have committed a violation for the purposes of the civil penalty.
(3) Notice of penalty. A civil penalty shall be imposed by a notice in writing, either by certified mail with return receipt requested or by personal service, to the person incurring the same from the department and/or the local government, or from both jointly. The notice shall describe the violation, approximate the date(s) of violation, and shall order the acts constituting the violation to cease and desist, or, in appropriate cases, require necessary corrective action within a specific time.

(4) Application for remission or mitigation. Any person incurring a penalty may apply in writing within thirty days of receipt of the penalty to the department or local government for remission or mitigation of such penalty. Upon receipt of the application, the department or local government may remit or mitigate the penalty only upon a demonstration of extraordinary circumstances, such as the presence of information or factors not considered in setting the original penalty.

When a penalty is imposed jointly by the department and local government, it may be remitted or mitigated only upon such terms as both the department and the local government agree.

[Statutory Authority: RCW 90.58.200. 87-16-101 (Order DE 87-09), § 173-17-050, filed 8/5/87.]

WAC 173-17-060 Appeal of civil penalty. (1) Right of appeal. Persons incurring a penalty imposed by the department or imposed jointly by the department and local government may appeal the same to the shorelines hearings board. Appeals to the shorelines hearings board are contested cases subject to the provisions of chapter 34.04 RCW. Persons incurring a penalty imposed by local government may appeal the same to the local government legislative authority.

(2) Timing of appeal. Appeals shall be filed within thirty days of receipt of notice of penalty unless an application for remission or mitigation is made to the department or local government. If such application is made, appeals shall be filed within thirty days of receipt of local government's and/or the department's decision regarding the remission or mitigation.

(3) Penalties due.

(a) Penalties imposed under this section shall become due and payable thirty days after receipt of notice imposing the same unless application for remission or mitigation is made or an appeal is filed. Whenever an application for remission or mitigation is made, penalties shall become due and payable thirty days after receipt of local government's and/or the department's decision regarding the remission or mitigation. Whenever an appeal of a penalty is filed, the penalty shall become due and payable upon completion of all review proceedings and upon the issuance of a final decision confirming the penalty in whole or in part.

(b) If the amount of a penalty owed the department is not paid within thirty days after it becomes due and payable, the attorney general, upon request of the department, shall bring an action in the name of the state of Washington to recover such penalty. The action shall be brought in Thurston County or in any county in which such violator may do business. If the amount of a penalty owed local government is not paid within thirty days after it becomes due and payable, local government may take actions necessary to recover such penalty.

(4) Penalty recovered. Penalties recovered by the department shall be paid to the state treasurer. Penalties recovered by local government shall be paid to the local government treasury. Penalties recovered jointly by the department and local government shall be divided equally between the department and the local government unless otherwise stipulated in the order.

[Statutory Authority: RCW 90.58.200. 87-16-101 (Order DE 87-09), § 173-17-060, filed 8/5/87.]

WAC 173-17-070 Criminal penalty. The procedures for criminal penalties shall be governed by RCW 90.58.220.

[Statutory Authority: RCW 90.58.200. 87-16-101 (Order DE 87-09), § 173-17-070, filed 8/5/87.]

WAC 173-17-080 Oil or natural gas exploration—Penalty. Persons violating the provisions of RCW 90.58.550 or chapter 173-15 WAC shall be subject to a civil penalty issued by the department in an amount of up to five thousand dollars a day. The procedures for oil or natural gas exploration penalties shall be governed by RCW 90.58.560.

[Statutory Authority: RCW 90.58.200. 87-16-101 (Order DE 87-09), § 173-17-080, filed 8/5/87.]

Chapter 173-18 WAC

SHORELINE MANAGEMENT ACT—STREAMS AND RIVERS CONSTITUTING SHORELINES OF THE STATE

WAC 173-18-280 Okanogan County. Streams

<table>
<thead>
<tr>
<th>Stream Name</th>
<th>Quadrangle Name and Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaver Creek</td>
<td>Blee Buck Mt. 7 1/2 Twp East 7 1/2</td>
</tr>
<tr>
<td>Bannoparte Creek</td>
<td>Tonasket 15</td>
</tr>
<tr>
<td>Chewack* River</td>
<td>Doe Mt.* 15 Winthrop 7 1/2</td>
</tr>
</tbody>
</table>

From the confluence of Beaver Creek and unnamed creek (NE1/4 of NE1/4 Sec. 26, T34N, R22E) downstream to mouth at Methow River (Sec.27, T33N, R22E).
From the confluence of Bonaparte Creek and Bannon Creek (Sec.32, T37N, R23E) downstream to mouth on Okanogan River near Tonasket (Sec.16, T37N, R27E).
From the Okanogan National Forest boundary (Sec.2, T33N, R21E) downstream to mouth at Methow River (Sec.2, T34N, R21E). The flow exceeds 300 cfs MAF at Okanogan N.F. boundary.

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<table>
<thead>
<tr>
<th>Stream Name</th>
<th>Quadrangle Name and Size</th>
<th>Legal Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4) Columbia River</td>
<td>Grand Coulee Dam 15</td>
<td>From the intersection of the Okanogan County line and the Colville Indian Reservation boundary (Sec.18, T30N, R25E) downstream right bank only to Chelan County line (Sec.31, T29N, R24E). The flow exceeds 200 cfs MAF at the Colville Indian Reservation boundary.</td>
</tr>
<tr>
<td>(5) Early Winters Creek</td>
<td>Mazama 15</td>
<td>From the Okanogan National Forest boundary line (Sec.23, T29N, R19E) downstream to mouth at Methow River (Sec.27, same township).</td>
</tr>
<tr>
<td>(6) Gold Creek</td>
<td>Concrete AMS Methow 7 1/2</td>
<td>From the confluence of Gold Creek and South Fork Gold Creek (Sec.17, T31N, R22E) downstream to mouth at Methow River (Sec.16, same township).</td>
</tr>
<tr>
<td>(7) Methow River*</td>
<td>Mazama 15</td>
<td>From the Okanogan National Forest boundary (Sec.6, T36N, R19E) downstream to mouth at the Columbia River (Sec.36, T30N, R23E) excluding all federal lands. The stream flow is 200 cfs MAF at confluence of Methow River and Lost River (Sec.5, T37N, R19E).</td>
</tr>
<tr>
<td>(8) Myers Creek</td>
<td>Mt. Bonaparte 15</td>
<td>From the confluence of Myers Creek and Mary Ann Creek (Sec.28, T40N, R30E) downstream to the Canadian Border (Sec.3, same township).</td>
</tr>
<tr>
<td>(9) Okanogan River*</td>
<td>Oroville* 15</td>
<td>From the United States–Canadian Border crossing Osoyoos Lake (Sec.4, T40N, R27E) downstream on both shores to Colville Indian Reservation (Sec.6, T34N, R27E) the west shore only to mouth at Columbia River (Sec.18, T30N, R25E), excluding all federal lands. This stream has over 200 cfs MAF and over 300 sq. miles of drainage area at United States–Canadian Border.</td>
</tr>
<tr>
<td>(10) Sanpoil River (W. FL.)</td>
<td>Aeneas Valley 15</td>
<td>From the confluence of West Fork Sanpoil River and Frosty Creek (Sec.12, T35N, R30E) to the Okanogan National Forest boundary (Sec.22, T35N, R31E).</td>
</tr>
<tr>
<td>(11) Similkameen River*</td>
<td>Loomis* 15</td>
<td>From the Canadian Border (Sec.4, T40N, R23E) downstream to mouth at Okanogan River (Sec.9, T39N, R27E) excluding all federal lands. This stream has over 200 cfs MAF and over 300 sq. miles of drainage at Canadian Border.</td>
</tr>
</tbody>
</table>
WAC 173-19-064 Review and adoption of master programs and amendments by the department. Review and adoption of master programs and amendments shall be in accordance with the provisions of RCW 34.04.025, insofar as such provisions are not inconsistent with the provisions of chapter 90.58 RCW, and shall follow the procedures set forth below:

(1) REVIEW:

(a) The department shall review the submitted master program or amendment for consistency with the provisions of WAC 173-19-062. If the submittal is determined to be incomplete, the department will identify the deficiencies and so notify local government in writing.

(b) For complete submittals a notice of intent to adopt the new or amended master program shall be filed with the state code reviser's office under the procedures and closing dates established by the code reviser. The department shall file notice in a manner that will allow for the most expeditious adoption of the new or amended program. If more than one local government submits new or amended programs to the department for action, the department may elect to consolidate the proceedings for adoption.

(c) The department shall hold a public hearing to consider the proposal.

(d) Prior to the public hearing, the department shall publish notice of the hearing and adoption proceeding in at least one newspaper of general circulation in the area affected by the master program. The public notice shall include:

(i) Reference to the authority under which the action is proposed; and

(ii) The dates, times, and locations of the public hearing and adoption proceeding, and the manner in which persons may present their views.

(e) The department shall also notify local governments, affected tribes, and interested state and federal agencies and persons who have expressed a desire to be advised of the proposed action.

(f) For new master programs and substantive amendments, a request for advice and guidance to members of the ecological commission shall be submitted at least thirty days prior to the adoption proceeding in accordance with chapter 43.21A RCW.

(g) An evaluation of economic impact shall be completed prior to the adoption proceeding in accordance with chapter 43.21H RCW.

(h) An evaluation of the proposal's consistency with chapter 90.58 RCW and the implementing regulations shall be completed prior to the adoption proceeding. Where minor modifications which are not substantial may render a program or amendment consistent, the department may propose such modifications for incorporation into the proposal without filing a new notice with the state code reviser. Prior to final adoption, any minor modifications shall receive written concurrence from local government.

(2) ADOPTION:

(a) Following the department's review of the master program or amendment, an adoption proceeding shall be conducted by the department within a reasonable time following the public hearing.

For administrative amendments, the adoption proceeding shall occur within forty-five days from the date of filing the notice of intent to adopt the proposal with the state code reviser's office: Provided, That an adoption proceeding may be continued if deemed necessary by the department.

(b) During the adoption proceeding, department staff shall present the evaluation completed under subsection (1)(h) of this section and recommend that the department:

(i) Adopt the new or amended program, or portions thereof;

(ii) Deny adoption of the new or amended program, or portions thereof. If it is recommended that any part of the master program or amendment be denied, the department staff shall state the reasons upon which that recommendation is based, including inconsistency with:

(A) The policies and procedures of the act;

(B) The guidelines, rules and regulations of the department; and

(C) The State Environmental Policy Act.

(c) If the department determines to adopt a new or amended master program, it shall file the amended rule and a copy of the new or amended master program with the state code reviser following the adoption proceeding. The department shall also notify the appropriate city clerk or county auditor of the final action taken.

(d) If the department determines to deny a new or amended master program, it shall advise local government in writing of the reasons for the denial and the department's suggested modifications to the proposal which would make it consistent with chapter 90.58 RCW and the implementing regulations. The local government may make the specific modifications designed to eliminate the inconsistencies and resubmit the proposal to the department. Any resubmitted program or amendment shall be subject to the full adoption procedure. With regard to those segments of the program which relate to shorelines of state-wide significance, the department may develop and adopt an alternative to the local government's proposal if the program submitted does not provide for the optimum implementation of the policies of chapter 90.58 RCW to satisfy the state-wide interest. The department shall notify local government of its intent to do so in writing at the adoption proceeding date and shall follow the procedure established under RCW 90.58.090(2).

(e) If the department determines to partially deny a master program or amendment, it shall receive written concurrence from the authorized local government official. If concurrence is not received, the department may deny the entire proposal.

(f) The procedure for adopting emergency rules described in RCW 34.04.030 shall be used in lieu of the procedure described above only if the criteria in RCW
WAC 173-19-070 Appeal procedures for master programs. The procedures for appeals by local government of the department's decision to approve, reject, or modify a proposed master program or master program adjustment shall be governed by RCW 90.58.190.


[Statutory Authority: RCW 90.58.120 and 90.58.200. 87-24-067 (Order DE 87-43), § 173-19-2517, filed 12/1/87. Statutory Authority: RCW 90.58.030 (3)(c), 90.58.120 and 90.58.200. 80-02-123 (Order DE 79-34), § 173-19-2517, filed 1/30/80.]


[Statutory Authority: RCW 90.58.120 and 90.58.200. 88-22-089 (Order DE 88-32), § 173-19-2601, filed 11/2/88; 82-07-003 (Order DE 82-2), § 173-19-2601, filed 3/4/82; 82-03-042 (Order DE 81-45), § 173-19-2601, filed 1/19/82. Statutory Authority: RCW 90.58.030 (3)(c), 90.58.120, and 90.58.200. 80-02-123 (Order DE 79-34), § 173-19-2601, filed 1/30/80.]


80-04-026 (Order DE 80-10), § 173-19-351, filed 3/18/80. Statutory Authority: RCW 90.58.030 (3)(c), 90.58.120 and 90.58.200. 80-02-123 (Order DE 79-34), § 173-19-351, filed 1/30/80.


Revision's note: RCW 34.04.058 requires the use of underlining and deletion marks to indicate amendments to existing rules, and deems ineffectual changes not filed by the agency in this manner. The bracketed material in the above section does not appear to conform to the statutory requirement.

[1988 WAC Supp—page 369]
Chapter 173-22 WAC
ADOPTION OF DESIGNATIONS OF WETLANDS ASSOCIATED WITH SHORELINES OF THE STATE

WAC 173-22-0648 Okanogan County.


[Statutory Authority: RCW 90.58.120 and 90.58.200. 88-03-070 (Order 88-06), § 173-22-0648, filed 1/20/88. Statutory Authority: RCW 90.58.030, 90.58.120 and 90.58.300. 87-20-050 (Order DE 87-45), § 173-22-0648, filed 10/2/87. Statutory Authority: Chapter 90.58 RCW. 86-12-011 (Order 86-06), § 173-22-0648, filed 5/23/86.]

Chapter 173-60 WAC
MAXIMUM ENVIRONMENTAL NOISE LEVELS

WAC 173-60-110 Cooperation with local government.

WAC 173-60-110 Cooperation with local government. (1) The department conceives the function of noise abatement and control to be primarily the role of local government and intends actively to encourage local government to adopt measures for noise abatement and control. Wherever such measures are made effective and are being actively enforced, the department does not intend to engage directly in enforcement activities.

(2) No ordinance or resolution of any local government which imposes noise control requirements differing from those adopted by the department shall be effective unless and until approved by the director. If approval is denied, the department, following submission of such local ordinance or resolution to the department, shall deliver its statement or order of denial, designating in detail the specific provision(s) found to be objectionable and the precise grounds upon which the denial is based, and shall submit to the local government, the department's suggested modification.

(3) The department shall encourage all local governments enforcing noise ordinances pursuant to this chapter to consider noise criteria and land use planning and zoning.

[Statutory Authority: Chapter 70.146 RCW. 88-14-125 (Order 88-70), § 173-95-010, filed 7/6/88.]

Chapter 173-95 WAC
USES AND LIMITATIONS OF CENTENNIAL CLEAN WATER FUNDS

WAC 173-95-010 Purpose and scope.

WAC 173-95-020 Definitions.


173-95-040 Limitations on the use of funds.

173-95-050 Compliance with applicable laws, regulations and other requirements.

173-95-060 Indemnification.

173-95-070 Appropriation of funds by the legislature.

173-95-080 General provisions.

173-95-090 Funding processes.

173-95-100 Marine water facilities funding category.

173-95-110 Ground water activities and facilities funding category.

173-95-120 Freshwater lakes and rivers activities and facilities funding category.

173-95-130 Nonpoint activities and facilities funding category.

173-95-140 Discretionary activities and facilities funding category.

173-95-150 Financial hardship eligibility and remedies.

173-95-160 Applicability of centennial clean water regulation and funds.
(5) "Department" means the department of ecology.
(6) "Director" means the director of the Washington state department of ecology or his or her authorized designee.
(7) "Eligible cost" for control of sanitary sewage and/or stormwater means the cost of that portion of the water pollution control facility that can be financed under this chapter and guidelines developed pursuant to this chapter excluding any portion of a facility's cost attributable to capacity that is in excess of that reasonably required to address one hundred ten percent of the applicant's needs for water pollution control existing at the time application is submitted for assistance under this chapter. "Eligible cost" for other water pollution control facilities and for water pollution control activities means the cost of that portion of the facility or activity that can be financed under the provisions of this chapter and guidelines developed pursuant to this chapter.
(8) "Engineering report" means a report evaluating engineering and other alternatives that meet the requirements set forth in chapter 173-240 WAC and compliance with the State Environmental Policy Act.
(9) "Environmental emergency" means a problem declared by a public body which poses a serious immediate threat to the environment or the health or safety of a community and for which the department concurs.
(10) "Extended grant payments" means cash disbursements made under a grant contract which do not follow the normal process of reimbursement at the time the eligible costs are incurred.
(11) "Facilities plan" means an engineering report which includes the additional elements required by the National Environmental Policy Act, other federal statutes and planning requirements for the federal wastewater construction grants and state revolving fund loan programs.
(12) "Federal grant" means a wastewater treatment construction grant for wastewater facilities and activities authorized by Title II of the Federal Water Pollution Control Act (as amended, 1987).
(13) "Final offer list" is the list of projects approved by the director which can receive funding from the account during the time period that the offer list is effective.
(14) "Freshwater" means any nonmarine surface water.
(15) "Funding category" means each of the five groups of facilities and/or activities specified in WAC 173-95-040 (2)(a) through (e).
(16) "Funding cutoff line" means the location on the project priority list and final offer list where the sum of requested financial assistance from the applicants above that line on the list is approximately equal to the amount of money being offered for that funding category. However, the priority point total for any of the applicants above the line must be greater than a minimum level that the department will set in the guidelines.
(17) "Ground water" means all waters that exist beneath the land surface or beneath the bed of any stream, lake or reservoir or other body of surface water, whatever may be the geological formation or structure in which such water stands or flows, percolates, or otherwise moves.
(18) "Infiltration and inflow correction" means the cost-effective alternative(s) identified in an approved engineering report or facilities plan for eliminating or reducing the infiltration and inflow (water, other than wastewater, that enters a sewer system) from an existing sewer system, including but not limited to, pipe replacement, grouting and slip lining.
(19) "Interceptor sewer" means a pipe which transports wastewater from collection sewers to a treatment facility, replaces a treatment plant by transporting its waste to another interceptor, collection system, or treatment plant; and/or eliminates or reduces some other discharge of inadequately-treated wastewater to receiving waters.
(20) "Lake restoration" means any action taken to prevent lake deterioration or return a lake system to an unimpaired state or condition.
(21) "Lake restoration phase I" means any comprehensive lake diagnostic or restoration feasibility study which culminates in a restoration plan.
(22) "Lake restoration phase II" means the implementation of the phase I lake restoration plan.
(23) "Loan default" means failure to make loan re-payment within sixty days after the date payment is due.
(24) "Marine water" means a body of water that is a territorial sea, or the waters of a contiguous zone, or "saline estuarine waters" which are semienclosed coastal waters which have a free connection to the territorial sea, undergo net seaward exchange with ocean waters and have salinities comparable to those of Puget Sound or other major bays and inlets. Generally, saline estuarine waters are those waters near the mouth of estuaries and contain indigenous biota characteristic of a marine environment.
(25) "Nonpoint source water pollution" means pollution that enters any waters of the state from any dispersed water-based or land-use activities, including but not limited to, atmospheric deposition, surface water runoff from agricultural lands, urban areas, and forest lands, subsurface or underground sources, and discharges from boats or other marine vessels.
(26) "Project" means water pollution control facility(s) and/or water pollution control activity(s) for which a public body applies for and/or receives a grant or loan.
(27) "Project priority list" means the list of rated and ranked projects for which state financial assistance is requested.
(28) "Public body" means the state of Washington or any agency, county, city or town, conservation district, other political subdivision, municipal corporation, quasi-municipal corporation, and those Indian tribes now or hereafter recognized as such by the federal government.
(29) "Public health emergency" means a situation declared by the department of social and health services in which illness or exposure known to cause illness is occurring or is imminent.
(30) "Service provider" means any privately-owned or publicly-owned profit or nonprofit corporation, partnership, joint venture, association, or other person or entity that is legally capable of contracting for and providing service with respect to the design, financing, ownership, construction, operation or maintenance of water pollution control facilities in accordance with chapter 70.150 RCW.

(31) "Severe public health hazard" means a situation declared by the department of social and health services and concurred by the department in which the potential for illness exists, but illness is not occurring or imminent. For the purposes of this chapter there must be contamination of drinking water or contamination must be present on the surface of the ground in such quantities and locations to create a potential for public contact. The problem must generally involve a serviceable area including but not limited to a subdivision, town, city, or county. Also, the problem cannot be corrected through more efficient operation and maintenance of a wastewater disposal system(s).

(32) "Sole source aquifer" means the sole or principal source of public drinking water for an area designated by the administrator of the Environmental Protection Agency pursuant to Public Law 93–523, Sec. 1424(e).

(33) "State revolving fund (SRF) loan" means a loan from the state water pollution control revolving fund established by Section 212 (Title VI) of the 1987 amendments to the Federal Water Pollution Control Act and by chapter 284, Laws of 1988 (E2SSB 6235).

(34) "Water pollution" means such contamination, or other alteration of the physical, chemical, or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive, or other substance into any waters of the state as will or is likely to create a nuisance or render such waters harmful, detrimental, or injurious to the public health, safety, or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish, or other aquatic life.

(35) "Water pollution control activities" or "activity" or "activities" means actions taken by the public body for the following purposes:

(a) To prevent or mitigate pollution of underground water;

(b) To control nonpoint sources of water pollution;

(c) To restore the water quality of freshwater lakes; or

(d) To maintain or improve water quality through the use of water pollution control facilities or other means.

(36) "Water pollution control facility" or "facility" or "facilities" means any facilities or systems for the control, collection, storage, treatment, disposal, or recycling of wastewater, including but not limited to sanitary sewage, stormwater, residential, commercial, industrial, and agricultural wastes, which are causing water quality degradation due to concentrations of conventional, non-conventional, or toxic pollutants. Water pollution control facilities include all equipment, utilities, structures, real property, and interests in and improvements on real property necessary for or incidental to such purpose. Water pollution control facilities also include facilities, equipment, and collection systems as are necessary to protect federally designated sole source aquifers.

[Statutory Authority: Chapter 70.146 RCW. 88–14–125 (Order 88–70), § 173–95–020; filed 7/6/88.]
WAC 173-95-050 Compliance with applicable laws, regulations and other requirements. (1) A public body receiving a grant or loan shall comply fully with all applicable federal, state, and local laws, orders, regulations and permits. Furthermore, applications for funding from public bodies must not be inconsistent with pertinent adopted water quality plans including, but not limited to, Federal Clean Water Act section 208, 319 and 320 plans, Puget Sound water quality management plan, shoreline master programs, ground water management programs and stormwater plans. A public body shall secure the necessary permits required by authorities having jurisdiction over the project, provide assurance that all permits have been secured, and make copies available to the department if requested.

(2) A public body receiving a grant or loan shall fully comply with all applicable federal, state, and local laws and regulations related to discrimination, labor, and job safety. Further, the public body shall comply with the state minority and women owned businesses regulation.

(3) A public body receiving a grant or loan for facilities construction shall submit a declaration of construction of water pollution control facilities to the department within thirty days following acceptance of the project or completed portion.

(4) The department shall place in every grant or loan contract a maximum dollar value above which the department will not reimburse. The maximum dollar value will be stated in the contract and may include specified adjustments to the initial contract dollar amount. Once the contract is effective, the public body will be expected to fulfill the scope of work required in the contract and only be reimbursed up to the maximum dollar value specified. The department will not increase the grant or loan dollar value of the contract.

(5) Grant and loan recipients are required to maintain accounting records in accordance with "generally accepted government accounting standards." These standards are defined as, but not limited to, those contained in the most recent edition of the United States General Accounting Office (GAO) publication: "Standards for Audit of Governmental Organizations, Programs, Activities and Functions" and the department's "Financial Guidelines for Grants Management," WDOE 80–6. For example, charges must be properly supported, related to eligible costs, and documented by appropriate records. Wherever this chapter and the implementing guidelines are more restrictive, this chapter and the guideline requirements shall control.

(6) In the event of loan default, the director may renegotiate loan contracts; however, if the public body fails to repay the loan according to the contract, the public body will be prohibited from receiving any future financial assistance from the state of Washington. The department will seek remedies through other state agencies or departments that provide any money to the public body. Accounting irregularities may result in an immediate stoppage of payment until irregularities are resolved. The director may require repayment of misused grant and loan funds.

(7) Appeals of contract decisions will be processed in accordance with the department's applicable appeals procedure. Only written decisions by the department made during the effective contract period will be appealable. Appeals must be filed with the financial assistance program disputes decision coordinator within forty-five days from the date of the department's written decision from which relief is sought.

(8) Contracts will be audited by the department or at the department's discretion by another authorized auditor.

WAC 173-95-060 Indemnification. (1) The department shall in no way be held responsible for payment of salaries, consultant's fees, and other overhead costs related to a grant or loan awarded to a public body.

(2) To the extent that the Constitution and laws of the state of Washington permit, the public body shall indemnify and hold the department harmless from and against any liability for any or all injuries to persons or property arising from the negligent act or omission of the public body arising out of a grant or loan contract except for such damage, claim, or liability resulting from the negligent act or omission of the department.

WAC 173-95-070 Appropriation of funds by the legislature. The department's obligation to make grant and loan payments is contingent upon the availability of funds through legislative appropriation, state allotment authorized by chapter 70.146 RCW, and WAC 173-95-080(2).

WAC 173-95-080 General provisions. (1) Agreements with service providers.

(a) Public bodies may enter into agreements with service providers for services in connection with water pollution control facilities as provided by chapter 70.150 RCW. The public body must assure that the service provider complies with WAC 173-95-050.

(b) A public body that enters into a service agreement under which a facility is owned wholly or partly by a service provider shall be eligible for grants or loans. The grants and/or loans shall be made to and benefit the public body not the service provider. The grants and/or loans shall be used by the public body for all or part of its ownership interest in the facility and/or to defray a
part of the payments it makes to the service provider under a service agreement.

(c) The department may make periodic disbursements to a public body or may make a single lump sum disbursement. Disbursements of funds with respect to a facility owned or operated by a service provider shall be equivalent in value to disbursements that would otherwise be made if that same facility were owned or operated by a public body. Payments for water pollution control facilities made to public bodies entering into service agreements pursuant to RCW 70.150.060 shall not exceed amounts that would have been paid to that public body had it not entered into service agreements.

(2) Extended grant payments.

(a) The department may enter into grant contracts with public bodies that provide for extended grant payments for eligible costs of facilities under chapter 70.146 RCW. The public body must be on a compliance schedule from a state or federal agency that requires such facilities be completed in a specific time period. In order to meet this compliance schedule, the moneys required for the facility identified in the grant application would exceed the funds available that the public body could be offered during a funding cycle.

(b) The total annual amount of extended payments shall not exceed the maximum allowable per project under the applicable funding category or one-half of the funding category whichever is less, unless the director determines that a larger amount is in the best interest of the state and the account.

c) Extended grant payments may be disbursed on an advanced or deferred basis in accordance with the grant contract between the department and the public body. These payments shall be in equal annual payments. The total amount shall not exceed on a net present value basis, fifty percent of the total eligible cost of the project incurred at the time of design and construction. After negotiation with the public body, the director may adjust the amount of the equal annual payments if it is in the public interest.

d) Extended grant payments shall be for a period not to exceed twenty years.

(e) The department’s total share of a project with extended grant payments shall not exceed fifty percent of the eligible costs received from available federal and state grant moneys.

(f) The department shall first use any moneys appropriated by the legislature from the account to satisfy the conditions of the extended grant payment contracts.

(3) Self certification. The department may authorize public bodies to certify compliance with selected program requirements. The public body must request such certification authority and document that it has the capability and the resources, that it is in the best interest of the state, and that the request is consistent with state and/or federal laws and regulations.

(4) State conservation commission and conservation districts.

(a) The state conservation commission receives directly from the legislature two and one-half percent of the moneys appropriated from the account. The commission shall distribute those moneys in accordance with their program objectives and with the statutory requirements. The department will coordinate as necessary with the state conservation commission to ensure that both programs are compatible with one another. In addition, the department, the state conservation commission, and the Washington state association of conservation districts may enter into a memorandum of agreement as to the coordination and distribution of funds from the account.

(b) The program requirements including but not limited to application requirements, priority rating criteria, and funding levels of the applicable funding category will apply.

(5) Ecology administration expenses. The department shall limit its expenses for administration of the program in conformance with the amount specified in RCW 70.146.030. These expenses shall include all direct and related indirect costs of developing, managing, and administering the contracts from the account that are awarded to public bodies. It shall not include direct expenses incurred to further the goals and objectives of chapter 70.146 RCW.

(6) Legislative reporting. The department shall report to the legislature no later than November 30 of each year on the use of the account moneys by the department. The report shall include, at a minimum, a list of the grant and loan recipients, date of grant or loan award, and the amount of money awarded to each recipient. Additional information will be furnished as appropriate.

(7) Prior authorization.

(a) The department recognizes that under very unusual circumstances, it may be advantageous to commence work on a project in advance of a signed and executed contract. If approved, the director will authorize the public body in writing to incur expenses which could be eligible for grant or loan moneys. Except for emergencies defined in WAC 173-95-140(1), prior authorization will be considered based upon the following conditions:

(i) The public body has an approved application for funding including a project scope of work, a detailed budget, and the project must also be on the fundable portion of a priority list; and

(ii) The scope, cost, effective date, and duration of the prior authorization is documented in writing from the department to the public body and is consistent with the public body’s application for grant or loan moneys; and

(iii) The purpose and any additional conditions are documented in writing; and

(iv) The prior authorization is in the best interest of the state.

(b) The public body assumes all responsibility for costs incurred. There is no guarantee on behalf of the department that a grant or loan will be awarded to that public body. Any work performed by the public body which is not consistent with the conditions specified in the department’s prior authorization letter(s) or which does not comply with the requirements set forth in the
Centennial Clean Water Funds

WAC 173-95-090 Funding processes. (1) Funding cycle – The director will establish grant and/or loan offer lists for each funding category. These lists shall be prepared on an annual basis unless after adequate public notice and comment the director determines that preparing lists on a biennial basis is in the best interest of the program. The amount of money available on an annual basis shall be approximately equal to one-half of the biennial appropriation less prior obligations such as extended grant payment contracts for grant or loan awards plus any moneys available from previous years.

(2) Application process – The department may use an interim application and funding cycle during fiscal years 1989 and 1990 in order to expedite the award of these moneys. Beginning in fiscal year 1991, the application period will be initiated during the third quarter (except for environmental emergencies, public health emergency and severe public health hazard as defined in WAC 173-95-020 (9), (29), and (31) which will be accepted at any time).

(3) Multifunding category projects – Applicants whose projects qualify in more than one funding category can apply and be rated in each funding category. If the applicant ranks high enough to be offered financial assistance in more than one category, the department will determine from which category an offer will be made. If the amount of money available from any one category is insufficient, the department may fund part of the project from one or more of the other categories in which they qualify.

(4) Priority rating list – The director shall establish a priority rating list for each funding category using criteria established by this chapter and department guidelines. This list will rank all applications received in priority order and propose for funding those applicants above the funding cut-off line. The director may establish an application review committee(s) as appropriate.

(5) Public review – The priority rating lists will be available for at least thirty days for public review and comment. A public hearing(s) may be conducted if the director determines there is significant public interest. Comments received during the public review period will be considered before the final offer lists are prepared.

(6) Final offer lists – The final offer lists will be approved by the director and made available on or about forty-five days after the close of the public review period. The final offer list will be effective until the next final offer list is made available. All offers are automatically cancelled after the effective period. If an applicant does not expect to be able to obtain a signed contract during the effective period, a new application should be submitted during the application period of the next funding cycle.

[Statutory Authority: Chapter 70.146 RCW. 88-14-125 (Order 88-70), § 173-95-090, filed 7/6/88.]

WAC 173-95-100 Marine water facilities funding category. General application requirements, priority rating criteria, and funding levels.

(1) General application requirements.

(a) Public bodies must demonstrate that the facility under the jurisdiction of the applicant is discharging directly into a marine water and is not in compliance with permit requirements, water quality standards, combined sewer overflow reduction plans, stormwater management plans, other regulatory requirements, or is otherwise adversely affecting marine waters.

(b) Public bodies must comply with the limitations, requirements, and general provisions on the use of funds contained in WAC 173-95-040, 173-95-050, and 173-95-080.

(c) Funding for collection sewers may be provided only if the facilities to be constructed will eliminate a public health emergency or severe public health hazard.

(d) Financial assistance for the planning phase of facility construction projects may be provided. Public bodies must complete an engineering report or a facilities plan, if appropriate. Public bodies must complete facilities plans if projects are to be considered for a federal grant or state revolving fund (SRF) loan.

(e) Financial assistance for preparation of plans and specifications for cost-effective facilities may be provided. If appropriate, public bodies must have completed a facilities plan or engineering report approved by the department.

(f) Financial assistance for cost-effective facility construction projects may be provided. If appropriate, the facilities plan or engineering report and plans and specifications must have been approved by the department.

(g) Cost-effective analyses of alternatives during the planning phase must be conducted for facilities without consideration of the availability of state and federal funding.

(h) Infiltration and inflow correction projects may receive funding only if the facilities plan or engineering report approved by the department document that such construction is the cost-effective alternative.

(2) Priority rating criteria.

(a) Water pollution control need for the project including, but not limited to, health impacts caused by existing circumstances, secondary treatment, reduction of combined sewer overflows, and stormwater management, including legally mandated requirements.

(b) Enforcement actions and compliance requirements relating to the discharge.

(c) Recommendations of the Puget Sound water quality authority and any other board, council, commission, or group, established by the legislature or a state agency to study water pollution control issues in the state.

(d) Water quality and beneficial use impacts caused by existing circumstances.

(e) Cost to residential ratepayers if no state assistance is provided.

(f) Problem prevention aspects of the proposed project.

(3) Funding levels.

[1988 WAC Supp—page 375]
WAC 173-95-110  Ground water activities and facilities funding category. General application requirements, priority rating criteria, funding levels.

(1) General application requirements.

(a) General.

(i) Public bodies must demonstrate that the project(s) will educate the public about ground water quality issues, study and diagnose ground water problems, correct and/or prevent potential adverse effects to ground water quality.

(ii) Public bodies must comply with the limitations, requirements, and general provisions on the use of funds contained in WAC 173-95-040, 173-95-050, and 173-95-080.

(b) Ground water planning and implementation activities.

(i) Public bodies applying for funds for developing ground water management area programs must be a lead agency or a cooperating agency for a designated ground water management area or a probable ground water management area as defined in chapter 173-100 WAC.

(ii) Projects to implement ground water management area programs prepared in accordance with chapter 173-100 WAC are eligible provided that the program has been certified by the department.

(iii) Other ground water activities are eligible for funding if they are an element of an adopted land use, sewer, or water plan, or they identify existing or potential problems associated with ground water quality.

(iv) Financial assistance for the planning phases of facilities construction projects may be provided. Public bodies must complete an engineering report or a facilities plan if appropriate. A facilities plan must be completed and approved by the department if projects are to be considered for a federal grant or state revolving fund (SRF) loan.

(c) Ground water facility design and construction.

(i) Financial assistance for preparation of plans and specifications for cost-effective facilities may be provided. If appropriate, public bodies must complete a facilities plan or engineering report approved by the department.

(ii) Financial assistance for cost-effective facility construction projects may be provided. If appropriate, public bodies must have completed a facilities plan or engineering report and plans and specifications approved by the department.

(iii) Cost-effective analysis of alternatives during the planning phase must be conducted for facilities without consideration of the availability of state and federal funding.

(iv) Funding for collection sewers may be provided only if the facility to be constructed will eliminate a public health emergency or severe public health hazard or as specified in subsection (3)(a) of this section.

(2) Priority rating criteria.

(a) General criteria – Ground water projects, excluding those specified in (b) of this subsection, shall be rated on the following criteria:

(i) Public health impacts caused by existing circumstances.

(ii) Water quality impacts caused by existing circumstances.

(iii) Problem prevention aspects of the proposed project.

(iv) Beneficial use impacts caused by existing circumstances.

(v) Enforcement actions and compliance.

(vi) Recommendations of the Puget Sound water quality authority and any other board, council, commission, or group established by the legislature or a state agency to study water pollution control issues in the state.

(vii) Local interest and commitment of the project.

(b) Spokane–Rathdrum Prairie Aquifer projects – Applications for funding activities and/or facilities to protect the Spokane–Rathdrum Prairie Aquifer that do not exceed two-thirds of the amount available in this funding category will not be rated but will receive a grant offer(s).

(c) Previously-rated projects – Ground water management area projects designated and rated on the FY 88’ general schedule who received partial funding under criteria established by WAC 173-100-060 may receive up to three hundred fifty thousand dollars each toward development and implementation of their ground water management area program. Such planning areas will be given higher funding priority during the 1989 and 1990 fiscal years funding cycles. If other department funds become available for funding these programs before the projects are rated, the total amount for funding each project will be reduced accordingly.
(3) Funding levels.
(a) At least two-thirds of the available ground water category funds shall be used to protect the Spokane–Rathdrum Prairie Aquifer.
(b) The remaining category funds can be used by public bodies to fund all other projects outside the boundaries of the Spokane–Rathdrum Prairie Aquifer.
(c) Unless the demand for funds from the ground water activities and facilities funding category is less than funds available and excluding provisions for extended grant payments, no public body, excluding those funded in accordance with subsection (2)(b) of this section, outside the boundaries of the Spokane–Rathdrum Prairie Aquifer may receive more than nine percent of the legislative appropriation from this funding category during a funding cycle.
(d) Fundable ground water activities and facilities will receive a grant for fifty percent of eligible costs and may be eligible for funding under the financial hardship criteria as defined in WAC 173–95–150.
(e) Loans may be issued to public bodies if they prefer such assistance and if sufficient funds are available. Loans will be available according to the financial hardship criteria established in WAC 173–95–150.

[Statutory Authority: Chapter 70.146 RCW. 88-14-125 (Order 88-70), § 173-95-110, filed 7/6/88.]

WAC 173–95–120 Freshwater lakes and rivers activities and facilities funding category. General application requirements, priority rating criteria, fund allocations, and funding levels.

(1) General application requirements.
(a) Public bodies must demonstrate that the project will eliminate adverse impacts to the water quality of a freshwater lake or river, the facility discharging to a freshwater lake or river is not in compliance with permit requirements, water quality standards, combined sewer overflow reduction plans, other regulatory requirements, or the project must demonstrate prevention of potential adverse water quality impacts to or restoration of a freshwater lake or river.
(b) Public bodies must comply with the limitations, requirements, and general provisions on the use of funds contained in WAC 173–95–040, 173–95–050, and 173–95–080.
(c) For lake restoration projects, public access to the lake must be provided. For lake restoration phase I projects, public access may consist of, but not be limited to, seasonal or year-round access. For lake restoration phase II projects year-round public access in the form of a multipurpose public park facility must be provided.
(d) Funding for collection sewers may be provided only if the facility to be constructed will eliminate a public health emergency or severe public health hazard.
(e) Financial assistance for the planning phase of facility construction projects may be provided. Public bodies must complete an engineering report or a facilities plan, if appropriate. Public bodies must complete facilities plans if projects are to be considered for a federal grant or state revolving fund (SRF) loan.

(f) Financial assistance for preparation of plans and specifications for cost-effective facilities may be provided. If appropriate, public bodies must have completed a facilities plan or engineering report approved by the department.
(g) Financial assistance for cost-effective facility construction projects may be provided. If appropriate, the facilities plan or engineering report and plans and specifications must have been approved by the department.
(h) Cost-effective analyses of alternatives during the planning phase must be conducted for facilities without consideration of the availability of state and federal funding.
(i) Infiltration and inflow correction projects may receive funding only if the facilities plan or engineering report approved by the department document that such construction is the cost-effective alternative.

(2) Priority rating criteria.
(a) Water quality impacts caused by existing circumstances.
(b) Beneficial use impacts caused by existing circumstances.
(c) Public health impacts caused by existing circumstances.
(d) Problem prevention aspects of the proposed project.
(e) Local interest in and commitment to the proposed project.
(f) For lake activities, the restoration potential of the proposed project.
(g) Enforcement actions and compliance requirements relating to the proposed project.
(h) Recommendations of the Puget Sound water quality authority and any other board, council, commission, or group established by the legislature or a state agency to study water pollution control issues in the state.

(3) Fund allocations.
(a) Lake activities excluding facilities will be rated separately from river and other freshwater activities and facilities in this funding category, and two separate priority rating lists will be established.
(b) Lake activities excluding facilities will receive forty percent of total category funds available in a funding cycle.
(c) River and other freshwater activities and facilities (excluding lake activities) will receive sixty percent of total category funds available in a funding cycle. However, a maximum of one lake facility will be funded from this funding subcategory during a funding cycle. In addition, at least one river activity, excluding facilities, will be funded during a funding cycle provided the project receives the minimum level of priority points set in accordance with WAC 173–95–020(16).
(d) If the demand for funds by either lake activities or river and other freshwater activities and facilities is less than that which is available to a subcategory in a funding cycle, funds may be made available to the other subcategory.

(4) Funding levels.
(a) Fundable freshwater activities excluding facilities will receive a grant for seventy-five percent of eligible costs and will not be eligible for further assistance under the financial hardship criteria.

(b) Fundable freshwater facilities will receive a grant for fifty percent of eligible costs after federal grant and SRF loan funds available for facilities have been obligated. These facilities may be eligible for funding under the financial hardship criteria as defined in WAC 173-95-150.

(c) For fundable freshwater facilities, when federal grants and/or SRF loan money is available, the director may exercise prerogative to issue state grant and loan combinations. These combinations would generally be structured such that they would be approximately equivalent to fifty-five percent grants for eligible costs. Grant percentages, loan interest rates, and terms of loans may be established to ensure that federal funds are obligated in a timely manner according to federal requirements.

(d) Loans may be issued to public bodies if they prefer such assistance and if sufficient funds are available. Loans will also be available according to financial hardship criteria established in WAC 173-95-150.

(e) Unless the demand for funds from the freshwater activities and facilities funding category is less than the funds available, and excluding provisions for extended grant payments, the following will apply:

(i) No public body may receive more than thirty percent of the legislative appropriation from this funding category during a funding cycle.

(ii) No public body applying for river activities excluding facilities shall receive more than five percent of the legislative appropriation from this funding category during a funding cycle.

(iii) All projects on any one freshwater lake may not exceed thirty percent of the legislative appropriation from this funding category during a funding cycle.

[Statutory Authority: Chapter 70.146 RCW. 88-14-125 (Order 88-70), § 173-95-120, filed 7/6/88.]

WAC 173-95-130 Nonpoint activities and facilities funding category. General application requirements, priority rating criteria, funding levels.

1 General application requirements.

(a) Public bodies must demonstrate that the project benefits the public within the local project area or the public at large.

(b) Public bodies must demonstrate that the project will eliminate adverse impacts to water quality of the receiving water, prevent potential adverse water quality impacts, study and diagnose water quality problems, or the project must educate the public about improving water quality.

(c) Financial assistance for the planning phase of facility construction projects may be provided. Public bodies must complete an engineering report or a facilities plan, if appropriate. Public bodies must complete facilities plans if projects are to be considered for a federal grant or state revolving fund (SRF) loan.

(d) Financial assistance for preparation of plans and specifications for cost-effective facilities may be provided. If appropriate, public bodies must have completed a facilities plan or engineering report approved by the department.

(e) Financial assistance for facility construction projects may be provided. If appropriate, public bodies must have completed a facilities plan or engineering report and plans and specifications that have been approved by the department.

(f) Public bodies must comply with the limitations, requirements, and general provisions on the use of funds contained in WAC 173-95-040, 173-95-050, and 173-95-080.

2 Priority rating criteria.

(a) Public health impacts caused by existing circumstances.

(b) Water quality and beneficial use impacts caused by existing circumstances.

(c) Problem prevention aspects of the proposed project.

(d) Recommendations of the Puget Sound water quality authority and any other board, council, commission, or group established by the legislature or a state agency to study water pollution control issues in the state.

(e) Enforcement actions and compliance requirements relating to the proposed project including but not limited to compliance with provisions of WAC 400-12-310.

(f) Establish/established a revenue source through local rates or other financial means to continue to achieve water quality objectives.

(g) Local interest in and commitment to the proposed project, and plans and programs to educate the public.

(h) Economic impacts to the public if the project is not undertaken.

(i) Consistency with water quality goals and objectives of the department.

3 Funding levels.

(a) Fundable activities excluding sanitary sewage facilities and stormwater management facilities will receive a grant for seventy-five percent of eligible costs and will not be eligible for further assistance under the financial hardship criteria.

(b) Fundable facilities excluding sanitary sewage facilities and stormwater management facilities will receive a grant for fifty percent of eligible costs and may be eligible for funding under the financial hardship criteria as defined in WAC 173-95-150.

(c) Fundable sanitary sewage facilities and stormwater management facilities will receive a grant for fifty percent of eligible costs and may be eligible for funding under the financial hardship criteria as defined in WAC 173-95-150.

(d) Loans may be issued to public bodies if they prefer such assistance and if sufficient funds are available. Loans will also be available according to the financial hardship criteria established in WAC 173-95-150.

(e) Unless the demand for funds from the nonpoint activities and facilities funding category is less than funds available and excluding provisions for extended
grant payments, no public body may receive more than five percent of the legislative appropriation for this funding category during a funding cycle. However, the department may fund one project for a facility that exceeds the five percent maximum, but in no case can the grant exceed seven hundred fifty thousand dollars. The selection of the project funded in excess of the five percent limit will be based on priority points.

[Statutory Authority: Chapter 70.146 RCW. 88-14-125 (Order 88-70), § 173-95-130, filed 7/6/88.]

WAC 173-95-140 Discretionary activities and facilities funding category. (1) Emergency funding subcategory (environmental emergency, public health emergency, severe public health hazard) - General application requirements, priority rating criteria, fund allocations, and funding levels.

(a) General application requirements.

(i) Public bodies must provide the department appropriate documentation of the emergency situation and that immediate corrective action is required.

(ii) Public bodies must identify the solution and the estimated cost required to solve the problem.

(iii) Public bodies must comply with limitations, requirements, and general provisions on the use of funds contained in WAC 173-95-040, 173-95-050, and 173-95-080.

(iv) Public bodies must certify their inability to finance the project without state assistance.

(v) Public bodies must specify whether a grant and/or loan is requested.

(vi) The department may authorize a public body in writing to commence work on a project in advance of a signed and executed contract.

(b) Priority rating criteria. Each application will be evaluated independently from others and funds will be issued according to the nature and severity of the problem.

(c) Fund allocations. The emergency subcategory may use up to twenty-five percent of the discretionary funding category during a funding cycle for grants and/or loans for activities or facilities.

(d) Funding levels.

(i) Fundable emergency projects will receive grants and/or loans in a manner consistent with the other applicable funding categories to the maximum extent possible. However, the department may award grants and/or loans up to one hundred percent of the project cost based upon unique situations.

(ii) Fundable emergency projects which are caused by improper operation and maintenance of an existing facility by public bodies will only be eligible for a loan.

(2) Supplemental funding subcategory. The general application requirements, priority rating criteria, and funding levels will be in accordance with the other major funding categories contained in WAC 173-95-100 through 173-95-130 and other general provisions of this chapter. The funding allocation for this subcategory will be at least twenty percent of the discretionary funding category. The final offer list for each of the other funding categories will reflect the allocation of moneys under this supplemental funding subcategory.

(3) Basic discretionary funding subcategory. Potential eligible projects, general application requirements, priority rating criteria, and funding levels.

(a) Potential eligible projects. Projects in the basic funding subcategory which may be eligible include water pollution control activities and facilities which prevent the degradation of or restore or improve the quality of the state's waters. Projects may include, but are not limited to: protection, enhancement, and restoration of fish rearing, spawning and migration areas, commercial and recreational shellfish beds; water quality monitoring and laboratory services, forest practices regulations and other activities which support local efforts; investigations, remedial and preventative activities for sediments in state waters that are contaminated with toxic material or otherwise inhibit reasonable beneficial use; protection of shorelands and wetlands where a water pollution control activity or facility is involved; technical assistance and enforcement related to water quality statutes, rules, and regulations.

(b) General application requirements. Public bodies must comply with the limitations, requirements, and general provisions on the use of funds contained in WAC 173-95-040, 173-95-050, and 173-95-080. Public bodies must demonstrate the inability to secure other sources of funding. In addition, the public bodies must meet two of the following requirements:

(i) Project is innovative and could be used as a demonstration project; or

(ii) Project would directly benefit water quality through a training and education process; or

(iii) Project addresses a water quality problem that has caused or is likely to cause a direct economic impact to the public; or

(iv) Project meets the legislative intent.

(c) Priority rating criteria. The priority of each project will be established according to criteria including, but not limited to: public health, water quality, beneficial use, problem prevention and corrective action not generally funded in other funding categories, enhancement of local and state agency water quality related programs, enforcement actions and compliance requirements, state-wide significance of a project, and recommendations of the Puget Sound water quality authority and any other board, council, commission, or group established by the legislature or a state agency to study water pollution control issues in the state.

(d) Funding levels.

(i) Fundable basic discretionary projects will receive grants and/or loans in a manner consistent with other applicable funding categories to the maximum extent possible. However, the department may award grants and/or loans up to one hundred percent of the project cost based upon unique situations.

(ii) Unless the demand for funds from the basic discretionary subcategory is less than the funds available, and excluding provisions for extended grant payments, no public body may receive more than ten percent of the

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legislative appropriation from this funding subcategory during a funding cycle.

[Statutory Authority: Chapter 70.146 RCW. 88-14-125 (Order 88-70), § 173-95-140, filed 7/6/88.]

WAC 173-95-150 Financial hardship eligibility and remedies. (1) The primary responsibility for obtaining the local share will be that of the public body. Before requesting financial hardship assistance beyond the basic available financial assistance, the public body must document that all other sources of funding are unavailable, and the project would still cause a financial hardship.

(2) For facilities including, but not limited to, construction of municipal sewage treatment facilities or combined sewer overflow reduction projects, where it can be determined the construction of the project will result in user charges in excess of one and one-half percent of the median household income, public bodies will be offered the following alternatives in accordance with the provisions of the applicable funding category:

(a) A fifty percent base grant with a fifteen percent supplemental grant which would bring the total grant to sixty-five percent of eligible costs; or

(b) A fifty percent base grant and a low interest loan for the remainder of the project with an interest rate structured to produce a user charge below the hardship level; or

(c) In the event that hardship criteria still apply after assistance is considered in (a) and (b) of this subsection, then additional assistance, such as additional grants and loans, may be available to attempt to reduce the financial burden to below the financial hardship level.

(3) For facilities where the hardship criterion of subsection (2) of this section, cannot be established because the public body does not have the legal ability to collect revenue or where user charges cannot be determined as a percentage of the median household income, financial hardship must be documented by the public body based on, but not limited to, such factors as unemployment trends, income levels, debt limitations, ability to repay debt incurred, and the overall financial conditions, for the area specifically affected. For activities and facilities that meet these financial hardship criteria, public bodies will be offered a fifty percent base grant with a fifteen percent supplemental grant which would bring the total grant to sixty-five percent of eligible costs in accordance with the provisions of the applicable funding category.

(4) For activities which do not involve facilities construction but which meet the hardship criteria established in subsection (3) of this section, public bodies will be offered a fifty percent base grant with a twenty-five percent supplemental grant which would bring the total grant to seventy-five percent of eligible costs in accordance with the provisions of the applicable funding category.

[Statutory Authority: Chapter 70.146 RCW. 88-14-125 (Order 88-70), § 173-95-150, filed 7/6/88.]

WAC 173-95-160 Applicability of centennial clean water regulation and funds. This chapter is not applicable to the allocation and uses of moneys administered by the department pursuant to chapter 284, Laws of 1988 (E2SSB 6235), and pursuant to special uses mandated by legislative appropriation. The director may utilize moneys appropriated from the account to provide the state match for the state revolving fund (SRF) loan program consistent with the requirements of chapter 70.146 RCW.

[Statutory Authority: Chapter 70.146 RCW. 88-14-125 (Order 88-70), § 173-95-160, filed 7/6/88.]

Chapter 173-100 WAC
GROUND WATER MANAGEMENT AREAS AND PROGRAMS

WAC
173-100-050 Probable ground water management areas. The department in cooperation with local government and ground water user groups shall identify probable ground water management areas.

(1) Probable ground water management areas may be proposed for identification at any time by the department upon its own motion or at the request of other state agencies, local government or ground water user groups.

(2) Probable ground water management area boundaries shall be delineated so as to enclose one or more distinct bodies of public ground water as nearly as known facts permit. Probable ground water management subareas shall be delineated so as to enclose all or any part of a distinct body of public ground water. Boundaries shall be based on hydrogeologic properties such as limits to lateral extent of aquifers, major perennial rivers, and regional ground water divides or as deemed appropriate by the department to most effectively accomplish the purposes of this chapter.

(3) The criteria to guide identification of probable ground water management areas shall include, but not be limited to, the following:

(a) Geographic areas where ground water quality is threatened;

(b) Aquifers that are declining due to restricted recharge or over-utilization;

(c) Aquifers in which over-appropriation may have occurred and adjudication of water rights has not yet been completed;

(d) Aquifers reserved or being considered for water supply reservation under chapter 90.54 RCW for future beneficial uses;

(e) Aquifers identified as the primary source of supply for public water supply systems;

(f) Aquifers underlying a critical water supply service area where the coordinated water system plan established pursuant to chapter 70.116 RCW has identified a need for a ground water management program;

(g) Aquifers designated as sole source aquifers by the federal Environmental Protection Agency;

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(h) Geographic areas where the ground water is susceptible to contamination or degradation resulting from land use activities;

(i) Aquifers threatened by seawater intrusion; or

(j) Aquifers from which major ground water withdrawals have been proposed or appear imminent.

(4) The state agency, local government or ground water user group requesting probable ground water management area identification shall provide sufficient information for the department to determine if the area should be so identified. The department and other affected state and local governments and user groups may cooperate in preparing the request for identification.

(a) The request for identification shall be presented in a concise, factual report form and shall consider the guidelines and criteria set forth in subsections (2) and (3) of this section as they relate to the proposed area. It shall also contain: (i) Supporting data as to the need for such identification; (ii) a general description of and rationale for the proposed ground water management area boundary; (iii) goals and objectives for the proposed ground water management area; (iv) an estimated cost of developing the ground water management program and potential funding sources; (v) recommendations for agencies, organizations and groups to be represented on the ground water management area advisory committee; and (vi) a recommendation for the lead agency, taking into consideration the responsibilities contained in WAC 173-100-080.

(b) The recommendation for lead agency shall first be submitted to the county or counties with jurisdiction for written concurrence. Such written concurrence shall be included with the information required in (a) of this subsection. If such concurrence cannot be obtained, the department shall attempt to mediate an agreement between the parties.

(c) The agency or ground water user group initiating the request for identification shall hold at least one public meeting for the purpose of receiving comments from the public, affected local, state and tribal agencies and ground water user groups.

(d) Upon completion, the request for identification shall be submitted to the department and other affected state and local agencies and ground water user groups for their review and comment. Comments shall be submitted to the department.

(5) If the department is proposing an area for identification, the department shall prepare a report containing the information in subsection (4)(a) of this section, hold a public meeting, and submit the report to affected state and local agencies and ground water user groups for their review and comment.

(6) Based upon review of the request for identification together with any comments received and a finding that the proposed area meets the guidelines and criteria of subsections (2) and (3) of this section, the department shall identify the proposed area as a probable ground water management area, establish the general planning boundaries and appoint a lead agency. When a probable ground water management area is included within only one county and that county indicates its desire to assume lead agency status, the department shall appoint the county as lead agency. The department shall notify affected state and local agencies, ground water user groups, tribal governments and local news media of such identification.

[Statutory Authority: Chapters 43.27A and 90.44 RCW. 88-13-037 (Order 88-11), § 173-100-050, filed 6/9/88. Statutory Authority: RCW 90.44.400. 86-02-004 (Order DE 85-24), § 173-100-050, filed 12/20/85.]

WAC 173-100-160 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.27A and 90.44 RCW. 88-13-037 (Order 88-11), § 173-100-160, filed 6/9/88.]

Chapter 173-124 WAC

QUINCY GROUND WATER MANAGEMENT

SUBAREA AND ZONES

WAC

173-124-06001 Repealed.
173-124-070 Subarea, zone, and unit distinctions.
173-124-080 Regulation review.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-124-06001 Subarea, zone, and unit distinctions. [Statutory Authority: RCW 43.21A.080, 43.27A.090 and 90.44-120. 78-05-007 (Order DE 77-36), § 173-124-060, (codified as WAC 173-124-06001), filed 4/7/78.] Repealed by 88-13-037 (Order 88-11), filed 6/9/88. Statutory Authority: Chapters 43.21A, 43.27A, 90.03 and 90.44 RCW.

WAC 173-124-06001 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-124-070 Subarea, zone, and unit distinctions. The Quincy unconsolidated zone and the Quincy basalt zone, defined at WAC 173-124-050, are separate and distinct depth zones, as that term is used in chapter 90.44 RCW. The Quincy unconsolidated zone and the Quincy basalt zone are different than the Quincy shallow management unit and the Quincy deep management unit, which are defined at WAC 173-134-020. The horizontal boundaries of the Quincy depth zones and the Quincy management units are identical to the exterior boundaries of the Quincy ground water subarea, and no Quincy depth zone or management unit extends beyond those boundaries, for comprehensive water management purposes. Neither does any depth zone of the Odessa ground water subarea, as defined at chapter 173-130 WAC, extend beyond the exterior boundaries of the Odessa ground water subarea, as those are defined and indicated at chapter 173-128 WAC. The bodies of ground water contained within the exterior boundaries of the Quincy ground water subarea are considered to be separate and distinct from the bodies of ground water contained within the exterior boundaries of the Odessa ground water subarea, which is significantly

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different than the Quincy ground water subarea in various respects.

This regulation is adopted to clarify the differences between the Quincy ground water subarea and the Odessa ground water subarea, and the differences among depth zones and management units. This regulation merely restates what the department of ecology consistently has understood to be the meaning and effect of this chapter and related chapters, notwithstanding any other understanding by the public or any other agency or board, federal or state.

[Statutory Authority: Chapters 43.21A, 43.27A, 90.03 and 90.44 RCW. 88-13-037 (Order 88-11), § 173-124-070, filed 6/9/88.]

WAC 173-124-080 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21A, 43.27A, 90.03 and 90.44 RCW. 88-13-037 (Order 88-11), § 173-124-080, filed 6/9/88.]

Chapter 173-128A WAC
	ODESSA GROUND WATER MANAGEMENT SUBAREA

WAC
173-128A-060 Regulation review.

WAC 173-128A-060 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21A, 43.27A, 90.03 and 90.44 RCW. 88-13-037 (Order 88-11), § 173-128A-060, filed 6/9/88.]

Chapter 173-130A WAC
	ODESSA GROUND WATER SUBAREA MANAGEMENT POLICY

WAC
173-130A-215 Enforcement.
173-130A-217 Appeals.
173-130A-220 Regulation review.

WAC 173-130A-215 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as are appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21A, 43.27A, 90.03 and 90.44 RCW. 88-13-037 (Order 88-11), § 173-130A-215, filed 6/9/88.]
WAC 173-134A-170 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions, made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

Statutory Authority: Chapters 43.21A, 43.27A, 90.03 and 90.44 RCW. 88-13-037 (Order 88-11), § 173-134A-170, filed 6/9/88.

WAC 173-134A-170 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions, made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

Statutory Authority: Chapters 43.21A, 43.27A, 90.03 and 90.44 RCW. 88-13-037 (Order 88-11), § 173-134A-170, filed 6/9/88.

Chapter 173-136 WAC

THE ESTABLISHMENT OF A SYSTEM OF AUTHORIZING THE WITHDRAWAL OF ARTIFICIALLY STORED GROUND WATERS EMBODIED IN AN APPROVED DECLARATION UNDER RCW 90.44.130, WHICH ARE COMMINGLED WITH PUBLIC GROUND WATERS IN GROUND WATER AREAS, SUBAREAS, AND ZONES ESTABLISHED UNDER RCW 90.44.130

WAC 173-136-095 Enforcement.

WAC 173-136-100 Appeals.

WAC 173-136-110 Regulation review.

WAC 173-136-095 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as are appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

Statutory Authority: Chapters 43.21A, 43.27A, 90.03 and 90.44 RCW. 88-13-037 (Order 88-11), § 173-136-095, filed 6/9/88.

WAC 173-136-100 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

Statutory Authority: Chapters 43.21A, 43.27A, 90.03 and 90.44 RCW. 88-13-037 (Order 88-11), § 173-136-100, filed 6/9/88.

WAC 173-136-110 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

Statutory Authority: Chapters 43.21A, 43.27A, 90.03 and 90.44 RCW. 88-13-037 (Order 88-11), § 173-136-110, filed 6/9/88.

Chapter 173-145 WAC

ADMINISTRATION OF THE FLOOD CONTROL ASSISTANCE ACCOUNT PROGRAM

WAC 173-145-010 Authority and purpose.


WAC 173-145-030 Eligibility criteria for FCAAP funds.

WAC 173-145-040 Comprehensive flood control management plan (CFCMP).

WAC 173-145-050 Floodplain management activities.

WAC 173-145-060 FCAAP project application process.

WAC 173-145-070 FCAAP project approval process.


WAC 173-145-090 Flood control assistance account funding and matching requirements.

WAC 173-145-100 Emergency fund administration.

WAC 173-145-110 Multyear projects.

WAC 173-145-120 Work standards for all FCAAP projects.

WAC 173-145-130 Project construction monitoring.

WAC 173-145-140 Written agreements.

WAC 173-145-150 Repealed.

WAC 173-145-155 Approval of changes to written agreements.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

WAC 173-145-150 Equipment rental. [Statutory Authority: Chapter 86.26 RCW. 85-14-002 (Order DE 85-10), § 173-145-150, filed 6/21/85 Repealed by 87-04-022 (Order 86-36), filed 1/28/87. Statutory Authority: Chapter 86.26 RCW.

WAC 173-145-010 Authority and purpose. RCW 86.26.050 provides that counties and other municipal corporations responsible for flood control maintenance may apply to the department of ecology for financial assistance for the preparation of comprehensive flood control management plans and for flood control maintenance projects. The purpose of such plans is described in RCW 86.26.105. The department shall determine priorities and allocate available funds from the flood control assistance account program (FCAAP) among those counties applying for assistance, and shall adopt regulations establishing the criteria by which such allocations shall be made. Such criteria shall be based upon proposals which are likely to bring about public benefits commensurate with the amount of state funds allocated thereto. This chapter describes the manner in which ecology will implement the provisions of the act.


WAC 173-145-020 Definitions. For the purposes of this chapter, the following definitions shall be used:

1) "Applicant." An eligible municipal corporation seeking matching funds for flood control maintenance work.

2) "Appropriate local authority." A county, city, or town having planning and land use jurisdiction within a given area which is covered by the comprehensive flood control management plan.

3) "Certification." Certification is the written confirmation between ecology and the appropriate local authority and the county engineer which verifies the understanding as to what the comprehensive flood control management plan will contain, the timing and anticipated product, and a reporting schedule that will allow for ecology review and input during the plan development.

4) "Comprehensive flood control management plan (CFCMP)." A document which determines the need for flood control work, considers alternatives to in-stream
flood control work, identifies and considers potential impacts of in-stream flood control work on the state's in-stream resources, and identifies the river's meander belt or floodway, as described in WAC 173-145-040.

(5) "County engineer." The appointed public works director, county engineer, or the person designated to act for the county engineer.

(6) "Eligible municipal corporation." Counties, cities, towns, conservation districts, flood control zone districts, or any special districts subject to flood conditions.

(7) "Emergency fund." That portion of the biennial appropriation allocated to the flood control assistance account which is set aside for emergency projects.

(8) "Emergency project." Flood control work necessary for reasons declared by the appropriate local authority and as authorized and approved by ecology which must be done immediately to protect lives or property.

(9) "Flood compatible land uses." Those uses of the land within the river's meander belt or floodway which comply with the minimum state, federal, and local flood plain management regulations.

(10) "Flood plain management activities." Activities described in WAC 173-145-050 performed by local governments through ordinances or other means to reduce the damaging effects of flooding.

(11) "Floodway." The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base (one hundred year frequency) flood without cumulatively increasing the water surface elevation more than a designated height.

(12) "Maintenance project." The work necessary to preserve or restore the natural condition or to restore man-made flood control facilities to their former condition using in-kind replacement materials or acceptable alternatives. This work is necessary due to anticipated actual damage or destruction from flooding by action of erosion, stream flow, sheet runoff, or other damages by the sea or other bodies of water.

(13) "Meander belt." That portion of the flood plain, that can be identified by the evidence of present and previous meanders. This shall include the present stream channel. Where there is no identified floodway, that area which is flood prone and has similar topographic characteristics to present and historic stream channels shall be considered as a meander belt.

(14) "Public benefit." Benefit to the health, safety, or general welfare of the citizens of the state or community at large which results from a flood control project or plan, or some benefit by which their rights or liabilities are affected such as an effect on public property or facilities owned or maintained by an eligible municipal corporation.

(15) "Special district." A district as defined in chapter 85.38 RCW which is either a diking district; a drainage district; a diking, drainage, and/or sewerage improvement district; an intercounty diking and drainage district; a consolidated diking district, drainage district, diking improvement district, and/or drainage improvement district; or a flood control district.

WAC 173-145-030 Eligibility criteria for FCAAP funds. Criteria to be used in determining eligibility for FCAAP funds are as follows:

1. Eligible municipal corporation. The applicant must be an eligible municipal corporation as defined in WAC 173-145-020(6).

2. Public benefit. The applicant must demonstrate that their comprehensive flood control management plans and flood control maintenance projects shall further the general public and state interest as differentiated from a private interest and that they shall bring about public benefits commensurate with FCAAP funds provided.

3. Comprehensive flood control management plan. The requirements of WAC 173-145-040 must be complied with by the appropriate local authority with flood control jurisdiction over the area where the proposed project is located.

4. Flood plain management activities. The appropriate local authority within whose jurisdiction projects are located shall be engaged in approved flood plain management activities as described in WAC 173-145-050.

5. Budget report. Any eligible municipal corporation seeking FCAAP funds shall submit its annual budget for flood control purposes to the county engineer within thirty calendar days after its final adoption. The county engineer shall then forward the budget report for eligible municipal corporations and for the county to ecology. The information will provide the basis for preparation of a preliminary plan for the most beneficial and orderly allocation of FCAAP funds. Soil Conservation districts shall be exempt from the provisions of this section.

WAC 173-145-040 Comprehensive flood control management plan (CFCMP). The county engineer of the county within which the maintenance project is located must certify that the CFCMP has been completed and adopted by the appropriate local authority or is being prepared. Comprehensive flood control management plans, and any revisions to the plans, must be approved by ecology, in consultation with the department of fisheries and game. The (CFCMP) must be completed and adopted within three years of the date that it is certified as being prepared. If, after the three-year period has elapsed, such a plan has not been completed and adopted, grants for flood control maintenance projects shall not be made to the county for projects by the appropriate local authority until the CFCMP is completed and adopted by the appropriate local authority. During the three-year period, projects within a drainage area, designated as the CFCMP study area, may be funded as part of a phased project plan, provided preliminary studies for the CFCMP have been conducted to identify the one-hundred-year frequency flood plain problem areas, and factors contributing to flooding; and provided...
that the proposed projects have been prioritized to achieve the greatest efficiency in flood control for the overall CFCMP study area. These limitations on grants shall not preclude allocations for emergency purposes made pursuant to RCW 86.26.060. The appropriate local authority may require the applicant to fully or partially fund the preparation of the CFCMP. The plan must include:

(1) Determination of the need for flood control work.
   (a) Description of the watershed.
   (b) Identification of types of watershed flood problems.
   (c) Location and identification of specific problem areas.
   (d) Description of flood damage history.
   (e) Description of potential flood damages.
   (f) Short-term and long-term goals and objectives for the planning area.
   (g) Description of regulations which apply within the watershed, including but not limited to local shoreline management master programs, and zoning, subdivision, and flood hazard ordinances.
   (h) Determination of instream flood control work being consistent with applicable policies and regulations.

(2) Alternative flood control work.
   (a) Description of potential measures of instream flood control work.
   (b) Description of alternatives to instream flood control work.

(3) Identification and consideration of potential impacts of instream flood control work on the following instream uses and resources.
   (a) Fish resources.
   (b) Wildlife resources.
   (c) Scenic, aesthetic, and historic resources.
   (d) Navigation.
   (e) Water quality.
   (f) Hydrology.
   (g) Existing recreation.
   (h) Other.

(4) Area of coverage for the comprehensive plan shall include, as a minimum, the area of the one–hundred–year frequency flood plain within a reach of the watershed of sufficient length to ensure that a comprehensive evaluation can be made of the flood problems for a specific reach of the watershed. The plan may or may not include an entire watershed. Comprehensive plans shall also include flood hazard areas not subject to riverine flooding such as areas subject to coastal flooding, flash flooding, or flooding from inadequate drainage. Either the meander belt or floodway shall be identified on aerial photographs or maps which will be included with the plan.

(5) Conclusion and proposed solution(s). The CFCMP shall be finalized by the following action from the appropriate local authority:
   (a) Evaluation of problems and needs;
   (b) Evaluation of alternative solutions;
   (c) Recommended corrective action(s) with proposed impact resolution measures for resource losses; and
   (d) Corrective action priority.

(6) A certification from the state department of community development that the local emergency management organization is administering an acceptable comprehensive emergency operations plan.

WAC 173–145–050 Flood plain management activities. Local jurisdictions within which flood control maintenance projects are located, must be engaging in flood plain management activities. Pursuant to chapter 86.26 RCW the director of the department of ecology must approve the flood plain management activities of the county, city, or town having jurisdiction over the area where the project will be located. To be eligible for FCAAP funding the local jurisdiction shall be required to:

(1) Participate in the National Flood Insurance Program (NFIP) and meet all of the NFIP requirements.

(2) Restrict land uses within the meander belt or floodway of rivers to only flood compatible uses. Where applicable, adopted shoreline management master programs will be considered a minimum land use measure.

WAC 173–145–060 FCAAP project application process. The project application process for the eligible municipal corporations’ applications shall include the following in the general sequence given.

(1) The applicant shall prepare the project application to comply with the provisions of chapter 86.26 RCW and this chapter. The application shall be made on a form furnished by ecology. A complete application shall include the following:

   (a) A written description of the project containing the following as a minimum: Name of applicant, name of affected water body, project summary, location, amount of local match, and proposed local funding source;
   (b) A detailed cost estimate identifying major project elements;
   (c) A map to identify water body names, stream river mile, section–township–range;
   (d) Construction plans; and
   (e) A description of the project benefits which describe how the project will mitigate flood damages and describe development which exists on adjacent and nearby lands which are protected by the facility.

(2) The applicant shall review the preliminary project proposal with the county engineer, the Washington departments of fisheries or game and the department of natural resources and any affected Indian tribes.

(3) The applicant shall submit a prioritized list of project applications to the county engineer.

(4) The county engineer shall submit a prioritized list of all project applications within the county to ecology.
(5) The county engineer shall furnish evidence to ecology that the comprehensive flood control management plan described in WAC 173-145-040 is being prepared or is completed and adopted by the appropriate local authority or and the flood plain management activities described in WAC 173-145-050 are being implemented.

WAC 173-145-070 FCAAP project approval process. The project approval process for the eligible municipal corporations' applications shall include the following in the general sequence given.

(1) Ecology will review all projects for compliance with the requirements pursuant to this chapter and chapter 86.26 RCW.

(2) Ecology shall consult with the state departments of fisheries and game in the development of a project priority list. The state department of natural resources, affected Indian tribes, and other affected parties may review and comment on the proposed project plans prior to approval.

(3) Thirty days public notice shall be given that the project priority list will be the subject of a public hearing. Notice of this hearing shall appear in the State Register pursuant to chapter 34.08 RCW.

(4) The project priority list will be available at the flood plain management section of the department of ecology, at least fifteen days prior to the public hearing.

(5) The public comments will be reviewed and ecology shall approve the project priority list as proposed or as revised in accordance with public comments.

(6) Ecology shall prepare and finalize the written agreements with the counties.

(7) The counties shall prepare and finalize the written agreements with the involved eligible municipal corporations within the county.

(8) The construction plans and specifications shall be prepared by the applicant for approval by the county engineer prior to submission to ecology for review and approval of each project for compliance with all requirements.

(9) The applicant shall acquire the necessary federal, state, and local permits or authorizations along with any other permission required to complete the project.

WAC 173-145-080 Criteria for allocation of funds. The priority given to projects by ecology, the counties, and other eligible municipal corporations shall involve consideration of the following criteria:

(1) The relationship of public benefits to total project costs.

(2) The priority which has already been established by each county.

(3) Intensity of local flood control management problems, including but not limited to their inter-relationships with:
   (a) Population affected;
   (b) Property and related development affected;
   (c) Land management and zoning;
   (d) Existing flood control management practices.

(4) Where the CFCMP is completed and adopted, the following will be considered:
   (a) Consistency with the plan or plan recommendations;
   (b) Priority of project as identified in the plan;
   (c) Implementation of plan or plan recommendations;
   (d) Potential impacts of instream uses and resources;
   (5) Where a CFCMP is being developed or has not been initiated, the following will be considered:
   (a) Evidence of multijurisdictional cooperation necessary for development of a comprehensive county or multicounty comprehensive flood control management plan (CFCMP);
   (b) Availability of qualified personnel or resources for planning purposes;
   (c) Availability of qualified personnel or resources for project construction purposes;
   (d) Other planning efforts undertaken or proposed within the planning jurisdiction and their relationship to flood control management;
   (e) Ability to make rapid progress toward development of a comprehensive flood control management plan;
   (f) Existing and proposed participation of community groups, private industry, professional organizations, the general public, and others toward the development and implementation of the proposed comprehensive flood control management plan.

WAC 173-145-090 Flood control assistance account funding and matching requirements. The flood control assistance account is established at four million dollars at the beginning of each biennium. The following criteria shall be used for allocating FCAAP funds:

(1) The amount of FCAAP funding for any project, except emergency projects described in WAC 173-145-100, shall not exceed fifty percent of the total project cost, including planning and design costs.

(2) The amount of FCAAP funds to prepare a CFCMP shall not exceed seventy-five percent of the full planning costs.

(3) The amount of FCAAP funds available for all nonemergency projects and CFCMP's in any county shall not exceed five hundred thousand dollars per biennium.

(4) In addition to the limits in subsection (3) of this section, an agency formed under chapter 86.13 RCW shall be allowed up to one hundred thousand dollars in FCAAP funds per biennium.

[1988 WAC Supp—page 386]
(5) In those areas where a designated CFCMP area extends into two or more jurisdictions, costs for a CFCMP may be shared by the involved local authorities.

[Statutory Authority: Chapter 86.26 RCW. 87-04-022 (Order 86-36), § 173-145-090, filed 1/28/87; 85-14-002 (Order DE 85-10), § 173-145-090, filed 6/21/85.]

WAC 173-145-100 Emergency fund administration. Funds shall be available for flood control projects in response to unusual, unforeseeable, and emergent flood conditions and shall be allocated in amounts adequate for the preservation of life and property. The following criteria shall be the basis of allocating the emergency funds:

(1) Appropriations from the FCAAP fund for emergency projects will require the declaration of an emergency by the appropriate local authority.

(2) Application for emergency funds must be made on the same form used for nonemergency fund applications.

(3) Payment of FCAAP funds for emergency projects will be based on project construction costs. Flood fighting costs may be included.

(4) Payment for emergency work shall be allocated on a first-come first-serve basis and shall not be based on any priority system.

(5) At the discretion of ecology, emergency funds may be made available for use on nonemergency projects.

(6) The maximum amount of emergency funds initially available for any one county is one hundred fifty thousand dollars per biennium. If the total available emergency funds are not needed by other counties and the amount of emergency funds needed in a county exceeds one hundred fifty thousand dollars the county can request additional emergency funds.

(7) The flood control assistance account contribution shall not exceed eighty percent of the eligible project cost of an emergency project.

(8) Emergency funds will only be made available to projects which have been given approval for matching funds by the department of ecology prior to construction work being performed.

[Statutory Authority: Chapter 86.26 RCW. 87-04-022 (Order 86-36), § 173-145-100, filed 1/28/87; 85-14-002 (Order DE 85-10), § 173-145-100, filed 6/21/85.]

WAC 173-145-110 Multiyear projects. Approval for eligibility by ecology will only be required once for a project which continues more than one biennium, but funding for each subsequent biennium is subject to further FCAAP appropriation by the legislature.

[Statutory Authority: Chapter 86.26 RCW. 87-04-022 (Order 86-36), § 173-145-110, filed 1/28/87; 85-14-002 (Order DE 85-10), § 173-145-110, filed 6/21/85.]

WAC 173-145-120 Work standards for all FCAAP projects. All work which is funded from the flood control assistance account shall conform to the standards and specifications of the county engineer.

[Statutory Authority: Chapter 86.26 RCW. 87-04-022 (Order 86-36), § 173-145-120, filed 1/28/87; 85-14-002 (Order DE 85-10), § 173-145-120, filed 6/21/85.]

WAC 173-145-130 Project construction monitoring. The following are the responsibilities and criteria for project construction monitoring and final approval:

(1) County engineer responsibilities. Associated with responsibility for project plan approval and supervision of the project work, the county engineer shall provide inspection to assure that all project work is conducted and completed according to the construction plans and specifications.

(2) Ecology's responsibilities. The authorized representative of the department of ecology shall have the right to enter at all reasonable times in or upon any property, public or private, for the purpose of monitoring and inspecting the project work as necessary to assure compliance with the terms of the appropriate written agreement. The authorized representative of the department of ecology is the contract officer and shall be identified in the written agreement. The county engineer will be informed prior to any inspection for purposes of construction monitoring and guidance by any representative of ecology other than the contract officer. Representatives of ecology may observe the construction process without prior notification of the county engineer.

(3) Final inspection and approval. Upon completion of the work, a final detailed inspection shall be made by the county engineer along with representatives from ecology and the applicant. Results of the final inspection shall be displayed in a written report prepared by ecology and, when appropriate, on "as built" construction plans. "As built" construction plans shall be submitted to ecology within thirty days after the final project inspection.

[Statutory Authority: Chapter 86.26 RCW. 87-04-022 (Order 86-36), § 173-145-130, filed 1/28/87; 85-14-002 (Order DE 85-10), § 173-145-130, filed 6/21/85.]

WAC 173-145-140 Written agreements. Written agreements will be prepared by ecology as a means to reimburse eligible municipal corporations for work done on approved eligible projects or for development of CFCMP's. Written agreements, billing, and payment shall comply with ecology's standard requirements for grants and contracts. Notification is required when written agreements will not be accepted or executed to allow ecology the opportunity to award prioritized, unfunded projects.

[Statutory Authority: Chapter 86.26 RCW. 87-04-022 (Order 86-36), § 173-145-140, filed 1/28/87; 85-14-002 (Order DE 85-10), § 173-145-140, filed 6/21/85.]

WAC 173-145-150 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-145-155 Approval of changes to written agreements. All flood control maintenance and comprehensive flood control management planning (CFCMP) projects subject to the provisions of this regulation shall be conducted in accordance with the plans, specifications, and conditions approved by ecology. Any contemplated changes during construction or planning process which are significant deviations from conditions of the approved agreement, shall first be submitted to ecology.
for approval. Any changes to the total cost of the project following execution of the written agreement must be submitted to ecology for approval prior to construction or plan completion.

[Statutory Authority: Chapter 86.26 RCW. 87-04-022 (Order 86-36), § 173-145-155, filed 1/28/87.]

Chapter 173-150 WAC
PROTECTION OF WITHDRAWAL FACILITIES
ASSOCIATED WITH GROUND WATER RIGHTS

WAC
173-150-125 Enforcement.
173-150-130 Appeals.
173-150-135 Regulation review.

WAC 173-150-125 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as are appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 18.104, 43.21A, 43.27A, 90.44 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-150-125, filed 6/9/88.]

WAC 173-150-130 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21A, 43.27A, 90.03 and 90.44 RCW. 88-13-037 (Order 88-11), § 173-150-130, filed 6/9/88; Statutory Authority: Chapters 90.44 and 90.54 RCW. 85-12-018 (Order 84-45), § 173-150-100, filed 5/29/85.]

WAC 173-150-135 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21A, 43.27A, 90.03 and 90.44 RCW. 88-13-037 (Order 88-11), § 173-150-135, filed 6/9/88.]

Chapter 173-154 WAC
PROTECTION OF UPPER AQUIFER ZONES

WAC
173-154-095 Enforcement.
173-154-100 Appeals.
173-154-105 Regulation review.

WAC 173-154-095 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as are appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21A, 43.27A, 90.03 and 90.44 RCW. 88-13-037 (Order 88-11), § 173-154-095, filed 6/9/88.]

WAC 173-154-100 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21A, 43.27A, 90.03 and 90.44 RCW. 88-13-037 (Order 88-11), § 173-154-100, filed 6/9/88.]

Chapter 173-158 WAC
FLOODPLAIN MANAGEMENT

WAC
173-158-010 Authority background.
173-158-020 Purpose.
173-158-030 Definitions.
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173-158-080 Wetlands management.
173-158-090 Penalties and enforcement.
173-158-100 Local compliance schedule.
173-158-110 State assumption of regulatory authority.
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WAC 173-158-010 Authority background. This chapter is adopted pursuant to chapter 86.16 RCW. Floodplain management as amended during the 1987 legislative session. Chapter 86.16 RCW was formerly titled Flood control zones by state.

[Statutory Authority: Chapter 86.16 RCW. 88-10-058 (Order 88-6), § 173-158-010, filed 5/4/88.]

WAC 173-158-020 Purpose. Chapter 86.16 RCW establishes state-wide authority for floodplain management through the adoption and administration by local governments of regulatory programs which are compliant with the minimum standards of the National Flood Insurance Program (NFIP). Chapter 86.16 RCW also directs the department of ecology to establish minimum state requirements for floodplain management, which equal or exceed the NFIP minimum standards; establishes authority for the department to administer floodplain management programs for local jurisdictions not participating in or meeting NFIP requirements; and allows for the issuance of regulatory orders.

[Statutory Authority: Chapter 86.16 RCW. 88-10-058 (Order 88-6), § 173-158-020, filed 5/4/88.]

[1988 WAC Supp—page 388]
WAC 173-158-030 Definitions. For the purposes of this chapter the following definitions shall apply:

(1) "Base flood" means the flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the "one hundred year flood."

(2) "Best available information" means in the absence of official flood insurance rate map data, communities can use data from other federal, state, or other sources provided this data has either been generated using technically defensible methods or is based on reasonable historical analysis and experience.

(3) "Coastal high hazard area" means the area subject to high velocity waters, including but not limited to storm surge or tsunamis. This area is designated on a FIRM as Zone V1-30, VE or V.

(4) "Critical facility" means a facility for which even a slight chance of flooding would be too great. Critical facilities include but are not limited to schools, hospitals, police, fire and emergency response installations, nursing homes, installations which produce, use, or store hazardous materials or hazardous waste.

(5) "Designated floodway" means the regulatory floodway which has been delineated on the flood insurance rate map (FIRM) or the flood boundary/floodway map (FBFM) of a community's flood insurance study and is included in the community's flood damage prevention ordinance.

(6) "Flood or flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from:

(a) The overflow of inland or tidal waters; and/or
(b) The unusual and rapid accumulation of runoff of surface waters from any source.

(7) "Flood insurance rate map (FIRM)" means the official map on which the federal insurance administration has delineated the areas of special flood hazard and the risk premium zones applicable to the community.

(8) "Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

(9) "Flood protection elevation" means one foot above the base flood elevation.

(10) "New construction" means structures for which the "start of construction" commenced on or after the effective date of the local ordinance.

(11) "Person" means an individual, partnership, corporation, association, organization, cooperative, public or municipal corporation, or any agency of the state or local governmental unit however designated.

(12) "Special flood hazard area" means an area subject to a base or one hundred year flood; areas of special flood hazard are shown on a flood boundary map or flood insurance rate map as Zone A, AO, A1-30, AE, A99, AH, VO, V1-30, VE, or V.

(13) "Structure" means a walled and roofed building, including a gas or liquid storage tank that is principally above ground. Manufactured homes are considered structures.

(14) "Start of construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement was within one hundred eighty days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, or filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundation or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

(15) "Substantial improvement" means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty percent of the market value of the structure either:

(a) Before the improvement or repair is started; or
(b) If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

The term does not, however, include either:

(c) Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions; or

d) Any alteration of a structure listed on the National Register of Historic Places or a state inventory of historic places.

(16) "Variance" means a grant of relief from the requirements of this chapter which permits construction in a manner that would otherwise be prohibited by this chapter.

(17) "Water dependent" means a water dependent structure for commerce or industry is one which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.

(18) "Wetlands" means lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. Wetlands have one or more of the following three attributes: (a) At least periodically, the land supports predominantly hydrophytes; (b) the substrate is predominantly undrained hydric soil; and (c) the substrate is nonsoils and is saturated with water or covered by shallow water at some time during the growing season of each year.

[Statutory Authority: Chapter 86.16 RCW. 88-10-058 (Order 88-6), § 173-158-030, filed 5/4/88.]

[1988 WAC Supp—page 389]
WAC 173-158-040 Regulatory area. The minimum regulatory area for state and local floodplain management regulations shall be those areas subject to a base (one hundred year) flood and designated as special flood hazard areas on the most recent maps provided by the federal Emergency Management Agency for the National Flood Insurance Program. Best available information shall be used if these maps are not available or sufficient as determined by the Federal Emergency Management Agency.

[Statutory Authority: Chapter 86.16 RCW. 88-10-058 (Order 88-6), § 173-158-040, filed 5/4/88.]

WAC 173-158-050 Criteria for land management and use. The standards and definitions contained in 44 CFR, Parts 59 and 60 for the National Flood Insurance Program are adopted as the minimum state standards by reference.

[Statutory Authority: Chapter 86.16 RCW. 88-10-058 (Order 88-6), § 173-158-050, filed 5/4/88.]

WAC 173-158-060 Additional state requirements. The following state requirements are established in accordance with RCW 86.16.031(7):

(1) Coastal high hazard areas. Communities with designated coastal high hazard areas (V-zones) from Cape Disappointment to Cape Flattery along the Pacific Ocean shall:

(a) Prohibit new or substantially improved construction in the above designated V-zones; exceptions are for needed water dependent structures or structures that facilitate public recreational access to the shore. Structures which require siting in the V-zone should, to the extent possible, be required to be sited landward of the primary dune if an active dune system is associated with the V-zone.

(b) Prohibit any alteration of dunes in the above designated V-zones which could increase potential flood damage; this restriction includes prohibiting any modification or alteration or disturbance of vegetative cover associated with dunes located in designated V-zones.

(2) Critical facilities. Critical facilities should be afforded additional flood protection due to their nature. Communities therefore shall impose minimum standards which are in addition to those used for other types of development.

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the one hundred year floodplain as identified on the community's FIRM. Construction of new critical facilities shall be permissible within the one hundred year frequency floodplain if no feasible alternative site is available. Critical facilities constructed within the one hundred year frequency floodplain shall have the lowest floor elevated to three or more feet above the level of the one hundred year frequency flood. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters.

Access routes elevated to or above the level of the one hundred year frequency flood shall be provided to all critical facilities to the extent possible.

(3) Flood protection elevation. In order to account for the impacts of future development on flood depths, and in order to ensure the least expensive insurance rates for floodplain occupants, all development within special flood hazard areas which requires elevation or floodproofing shall be elevated or flood proofed to or above the flood protection elevation (base flood elevation plus one foot).

[Statutory Authority: Chapter 86.16 RCW. 88-10-058 (Order 88-6), § 173-158-060, filed 5/4/88.]

WAC 173-158-070 Additional floodway requirements. The following additional state requirements are established in accordance with RCW 86.16.041.

(1) Special flood hazard areas with designated floodways. In addition to those NFIP requirements for designated floodways, communities with designated floodways shall restrict land uses within such areas to include the prohibition of construction or reconstruction of residential structures except for: (a) Repairs, reconstruction, or improvements to a structure which do not increase the ground floor area; and (b) repairs, reconstruction, or improvements to a structure the cost of which does not exceed fifty percent of the market value of the structure either (i) before the repair, reconstruction, or improvement is started, or (ii) if the structure has been damaged, and is being restored, before the damage occurred. Work done on structures to comply with existing health, sanitary, or safety codes or to structures identified as historic places shall not be included in the fifty percent determination.

(2) Special flood hazard areas without designated floodways. When a regulatory floodway for a stream has not been designated, the community may require that applicants for new construction and substantial improvements reasonably utilize the best available information from a federal, state, or other source to consider the cumulative effect of existing, proposed, and anticipated future development and determine that the increase in the water surface elevation of the base flood will not be more than one foot at any point in the community. Building and development near streams without a designated floodway shall comply with the requirements of 44 CFR 60.3 (b)(3) and (4) and (C) (10) of the NFIP regulations.

[Statutory Authority: Chapter 86.16 RCW. 88-10-058 (Order 88-6), § 173-158-070, filed 5/4/88.]

WAC 173-158-080 Wetlands management. Wetlands are areas of great natural productivity and hydrological utility, providing natural flood control, flood desynchronization, and flow stabilization of rivers and streams. The unrestricted use and development of wetlands will destroy many of these beneficial qualities which directly affect human health and safety during flood events. The piecemeal alteration and destruction of wetlands through draining, dredging, filling and other means has an adverse cumulative impact on their ability to reduce flood damages.

Communities should, to the maximum extent possible, seek to avoid the short and long term adverse impacts.
associated with the destruction or modification of wetlands, especially those activities which limit or disrupt the ability of the wetland to ameliorate flooding impacts. Proposals for development within special flood hazard areas (base floodplains) should be reviewed for their possible impacts on wetlands located within the floodplain. Communities should ensure that development activities in or around wetlands do not negatively affect public safety, health, and welfare by disrupting the wetlands' ability to reduce flood and storm hazards.

Communities may request technical assistance from the department of ecology in identifying wetland areas. Existing wetland map information from the National Wetlands Inventory (NWI) can be used in conjunction with the community’s FIRM to prepare an overlay zone indicating critical wetland areas deserving special attention. Local wetlands management strategies can also be developed which will preserve these valuable areas.

[Statutory Authority: Chapter 86.16 RCW. 88-10-058 (Order 88-6), § 173-158-080, filed 5/4/88.]

**WAC 173-158-090 Penalties and enforcement.** (1) The attorney general or the attorney for the local government shall bring such injunctive, declaratory, or other actions as are necessary to ensure compliance with this chapter.

(2) Any person who fails to comply with this chapter shall also be subject to a civil penalty not to exceed one thousand dollars for each violation. Each violation or each day of noncompliance shall constitute a separate violation.

(3) The penalty provided for in this section shall be imposed by a notice in writing, either by certified mail with return receipt requested or by personal service, to the person incurring the same from the department or local government, describing the violation with reasonable particularity and ordering the act or acts constituting the violation or violations to cease and desist or, in appropriate cases, requiring necessary corrective action to be taken within a specific and reasonable time.

(4) Any penalty imposed pursuant to this section by the department shall be subject to review by the pollution control hearings board. Any penalty imposed pursuant to this section by local government shall be subject to review by the local government legislative authority. Any penalty jointly imposed by the department and local government shall be appealed to the pollution control hearings board.

[Statutory Authority: Chapter 86.16 RCW. 88-10-058 (Order 88-6), § 173-158-090, filed 5/4/88.]

**WAC 173-158-100 Local compliance schedule.** Communities will have six months from the effective date of this chapter to adopt or amend their local flood damage reduction ordinances to incorporate the requirements of chapter 86.16 RCW and this chapter. Such ordinances or amendments shall take effect thirty days from filing with the department unless the department disapproves such ordinance or amendment, in writing, within that time period. The department may disapprove any ordinance or amendment which does not comply with the requirements of the NFIP, WAC 173-158-040, 173-158-060, or 173-158-070.

[Statutory Authority: Chapter 86.16 RCW. 88-10-058 (Order 88-6), § 173-158-100, filed 5/4/88.]
PART TWO—WATER SUPPLY WELLS

173-160-205 Location of well site and access requirements. Repealed.


173-160-235 Recommended well diameters. Repealed.


173-160-270 Location of dug wells. Repealed.


173-160-295 Location of well site and access requirements. Repealed.


173-160-325 Special standards for driven or jetted wells. Repealed.


173-160-335 Disinfection. Repealed.


173-160-360 Abandonment of wells—Abandonment of drilled or jetted wells. Repealed.


173-160-380 Abandonment of drilled or jetted wells. Repealed.


173-160-405 Artificial recharge of ground-water bodies. Repealed.


173-160-430 Abandonment of wells—Abandonment of drilled or jetted wells. Repealed.


173-160-470 Artificial recharge of ground-water bodies. Repealed.


173-160-300 Abandonment or destruction of wells—Abandonment or destruction of drilled or jetted wells. [Order 73-6, § 173-160-300, filed 4/30/73.] Repealed by 88-08-070 (Order 88-58), filed 4/6/88. Statutory Authority: Chapter 18.104 RCW.


PART ONE—GENERAL REQUIREMENTS

WAC 173-160-010 Purpose. (1) These regulations are adopted pursuant to chapter 18.104 RCW, in order to establish minimum standards for the construction of all wells in the state of Washington. These regulations establish minimum construction standards for two classes of wells; water supply wells and resource protection wells. Water supply wells include wells used to appropriate water for beneficial purposes, cased dewatering wells, and test wells. Resource protection wells include: Monitoring wells, observation wells, piezometers, geotechnical test borings, and spill response wells.

(2) Provisions of Part One shall apply to all wells. Provisions of Part Two shall apply to water supply wells. Provisions of Part Three shall apply to resource protection wells.

(3) The following are excluded from these regulations:
(a) Excavations that are not used to locate, divert, artificially recharge, or withdraw ground water.
(b) Post holes.
(c) Landfill gas extraction wells.
(d) An excavation for the purpose of obtaining or prospecting for oil, natural gas, minerals, products of mining, quarrying, inserting media to repressurize oil or natural gas bearing formations, storing petroleum, natural gas, or other products, as provided in chapter 78.52 RCW.
(e) Injection wells, such as stormwater disposal or recharge wells regulated in chapter 173-218 WAC.
(f) Cathodic protection wells.
(g) Uncased wells used for dewatering purposes in construction work, and other uncased excavations, such as uncased geotechnical test borings. However, the provisions of WAC 173-160-055, 173-160-010(4), and 173-160-420 shall apply.
(h) Infiltration galleries, trenches, ponds, pits, and sumps.

(4) Pursuant to chapter 90.48 RCW, those excavations excluded in subsection (3)(a) through (h) of this section shall be constructed and abandoned to ensure protection of the ground water resource and to prevent the contamination of that resource.

WAC 173-160-020 General. The following minimum standards shall apply to all wells constructed in the state of Washington. It is the responsibility of the water well contractor and the property owner to take whatever measures are necessary to guard against waste and contamination of the ground water resources.

(1) It will be necessary in some cases to construct wells with additional requirements beyond the minimum standards. Additional requirements are necessary when
the well is constructed in or adjacent to a source of contamination. Sources of contamination include, but are not limited to, the following: Septic systems, lagoons, landfills, hazardous waste sites, salt water intrusion areas, chemical storage areas, and pipelines.

(2) When strict compliance with these regulations is impractical, the well contractor or driller shall make application to the department for approval of comparable alternative specifications (a variance) prior to the work being done. The department shall authorize or deny a variance request within fourteen days of receipt of a written request. In an emergency, a public health emergency, or in exceptional instances, the department will allow verbal notification to the appropriate regional office, with a written request follow-up.


**WAC 173-160-030 Definitions.** As used in this chapter:

(1) "Abandoned well" is a well which has been filled or plugged so that it is rendered unproductive. A properly abandoned well will not produce water nor serve as a channel for movement of water.

(2) "Access port" is a 1/2- to 2-inch tapped hole or tube equipped with a screw cap, which provides access to the inner casing, for measurement of the depth to water surface.

(3) "Annular space" is the space between the surface or outer casing and the inner casing, or the space between the wall of the drilled hole and the casing.

(4) "Aquifer" is a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of ground water to wells or springs.

(5) "Artesian well" is a well tapping an aquifer bounded above and below by impermeable beds or beds of distinctly lower permeability than the aquifer itself. The water will rise in the well above the point of initial penetration (above the bottom of the confining or impermeable layer overlying the aquifer). This term includes both flowing and nonflowing wells.

(6) "Artificial gravel pack" is a mixture of gravel and/or sand placed in the annular space around the well screen. A gravel pack is used to reduce the movement of finer material into the well reduce the movement of finer material into the well, increase the well yield and provide lateral support to the screen in unstable formations.

(7) "Artificial recharge" is the addition of water to an aquifer by activities of man, such as irrigation or induced infiltration from streams, or injection through wells.

(8) "Bentonite" is a mixture of swelling clay minerals, predominantly sodium montmorillonite.

(9) "Capped well" is a well that is not in use and has a watertight seal or cap installed on top of the casing.

(10) "Casing" is a pipe, generally of metal or plastic, which is installed in the bore hole to maintain the opening.

(11) "Curbing" is a liner or pipe made of concrete, precast tile or steel installed in dug wells to provide a space between the well bore and the liner for sealing.

(12) "Consolidated formation" means any geologic formation in which the earth materials have become firm and coherent through natural rock forming processes. Such rocks commonly found in Washington include basalt, granite, sandstone, shale, conglomerate, and limestone. An uncased drill hole will normally remain open in these formations.

(13) "Contamination" is an impairment of natural ground water quality by biological, chemical, physical, or radiological materials which lower the water quality to a degree which creates a potential hazard to the environment, public health, or interferes with a beneficial use.

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

(15) "Disinfection" is the use of chlorine, or other disinfecting agent or process approved by the department, in sufficient concentration and contact time adequate to inactivate coliform or other indicator organisms.

(16) "Domestic water supply" is any water supply serving one or more single family residences.

(17) "Drawdown" is the measured difference between the static water level and the water level induced by pumping.

(18) "Drilled well" is a well in which the hole is usually excavated by mechanical means such as rotary, cable tool, or auger rigs.

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

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

(21) "Filter pack" means clean, well rounded, smooth, uniform, sand or gravel, which is placed in the annulus of the well between the borehole wall and the well screen to prevent formation material from entering the well.

(22) "Formation" means an assemblage of earth materials grouped together into a unit that is convenient for description or mapping.

(23) "Geotechnical test boring" means any temporary cased boredhole completed primarily for the purpose of obtaining geologic, or geotechnical data about subsurface soil or rock conditions, and/or for determining ground water levels.

(24) "Grout" is a fluid mixture of cement, bentonite, and water used to seal the annular space around or between well casings, or to fill and seal abandoned wells.

(25) "Impermeable" is a descriptive term for earth materials which have a texture or structure that does not permit fluids to perceptibly move into or through its pores or interstices.

(26) "Licensee" is any person who is licensed as a well contractor pursuant to the provisions of this act and these rules.

(27) "Liner" means any casing, screen, or other device inserted into a larger casing, screen, or open hole as
a means of sealing off undesirable material or maintaining the structural integrity of the well.

(28) "Landfill gas extraction well" is a well used to withdraw gas from an unsaturated zone.

(29) "Monitoring well" is a well designed to obtain a representative ground water sample and/or to measure the water level elevation over the screened interval.

(30) "Observation well" is a well designed to measure the depth to the water table. An observation well is screened across the water table and usually is installed in unconfined aquifers.

(31) "Operator" is any person employed by a well contractor or self-employed as a contractor-operator for the control and supervision of well construction or for the operation of well construction equipment.

(32) "Permeability" means the case with which a porous material allows liquid or gaseous fluids to flow through it. For water, this is usually expressed in units of centimeters per second and termed hydraulic conductivity. Soils and synthetic liners with a permeability for water of 1 x 10⁻⁷ cm/sec or less may be considered impermeable.

(33) "Piezometer well" is a well designed to measure the hydraulic potential (water level elevation) at a specific point in the subsurface. A piezometer has a short screen that is positioned entirely beneath the water table.

(34) "Pressure grouting" is a method of forcing grout into specific portions of a well for sealing purposes.

(35) "PTFE" means polytetrafluoroethylene casing materials (such as teflon) and is not an endorsement for any specific PTFE product.

(36) "Public water supply" is any water supply intended or used for human consumption or other domestic uses, including source, treatment, storage, transmission and distribution facilities where water is furnished to any community, collection or number of individuals, available to the public for human consumption or domestic use, excluding water supplies serving one single family residence.

(37) "Puddling clay" is a mixture of at least fifty percent bentonite and fine sand material which seals out or retards the movement of water.

(38) "PVC" means polyvinyl chloride a type of thermoplastic casing.

(39) "Resource protection wells" mean monitoring wells, observation wells, piezometers and spill response wells, and cased geotechnical test borings.

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

(41) "Static water level" is the vertical distance from the surface of the ground to the water level in a well when the water level is not effected by pumping or free flow.

(42) "Temporary surface casing" is a length of casing (at least four inches larger in diameter than the permanent casing) which is temporarily installed during well construction to maintain the annular space.

(43) "Test well" is a well (either cased or uncased), constructed to determine the quantity of water available for beneficial uses identifying underlying rock formations (lithology), and to locate optimum zones to be screened or perforated.

If a test well is constructed with the intent to withdraw water for beneficial use, it must be constructed in accordance with the minimum standards for water supply wells, otherwise they shall be constructed in accordance with the minimum standards for resource protection wells.

(44) "Tremie tube" is a small diameter pipe used to place grout, filter pack material, or other well construction materials in a well.

(45) "Unconsolidated formation" means any naturally occurring, loosely cemented or poorly indurated earth material including such materials as unconsolidated gravel, sand, silt and clay. Alluvium, soil, and overburden are terms frequently used to describe such formations.

(46) "Water supply well" means any well that is used to withdraw, dewater, or recharge ground water.

(47) "Well" means and includes any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed when the intended use of an excavation is for the location, diversion, artificial recharge, or withdrawal of ground water. Well includes water-supply well and resource protection well. Well does not mean excavations excluded in WAC 173-160-010(3).

(48) "Well contractor" means any person, firm, partnership, copartnership, corporation, association, or other entity engaged in the business of constructing wells.

(49) "Well driller" is synonymous with "operator."

(50) "Well rig" is any power driven, percussion, rotary, boring, digging, jetting or auguring machine used in the construction of a well.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-030, filed 4/6/88; Order 73-6, § 173-160-030, filed 4/30/73.]

WAC 173-160-040 Permit. As provided in RCW 90.44.050, no well shall be constructed if a withdrawal of more than five thousand gallons a day or irrigation of more than one-half acre of noncommercial lawn and garden is contemplated, unless an application to appropriate such waters has been made to the department and a permit has been granted.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-040, filed 4/6/88; Order 73-6, § 173-160-040, filed 4/30/73.]

WAC 173-160-050 Records. (1) Every well contractor, within thirty days after completion of a well, is required to submit a complete record on the construction or alteration of the well to the department. This shall apply to all water supply and resource protection wells. The well record shall be made on a form provided by the department, or a reasonable facsimile, as approved by the department.

(2) The water supply and test well record shall include the following information, where applicable, as a minimum: Location of well to at least 1/4, 1/4 section or smallest legal subdivision; intended use of well; the

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depth, diameter, and general specifications of each well; the depth, thickness and character of each bed, stratum or formation penetrated by each well; and the commercial specifications of all casing, also of each screen or perforated zone in the casing; the tested capacity of each well in gallons per minute; for each nonflowing well, the depth to the static water level, as measured below the land surface, and also the drawdown of the water level at the end of the well capacity test; for each flowing well, the shut-in pressure measured above the land surface, or in pounds per square inch at the land surface, and such additional factual information as reasonably may be required by the department.

(3) The well record shall be made on a form provided by the department, or a reasonable facsimile, as approved by the department. The resource protection well record shall include the following information as a minimum: Project name, if appropriate; location of well to at least 1/4, 1/4 section or smallest legal subdivision; land surface datum; well identification number; diameter; depth, and general specifications of each well; the depth thickness and character of each bed, stratum or formation penetrated by each well; and commercial specifications of all casing and screen;—as-built diagram; and additional information as required by the department.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-050, filed 4/6/88; Order 73-6, § 173-160-050, filed 4/30/73.]
nor shall it preclude the adoption of more stringent minimum well construction standards by local government.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-095, filed 4/6/88.]

WAC 173-160-100 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-105 Comparable construction standards. Nothing in these regulations shall be construed to limit the department's authority to approve comparable alternative specifications for well construction as technology in the industry develops and/or new and comparable methods of construction become known to the department.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-105, filed 4/6/88.]

WAC 173-160-110 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-115 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as are appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190, civil penalties under RCW 90.03.600 and 18.104.155, and criminal penalties under RCW 18.104.160.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-115, filed 4/6/88.]

WAC 173-160-120 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-125 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-125, filed 4/6/88.]

WAC 173-160-130 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-135 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.


WAC 173-160-140 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-150 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-160 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-170 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-180 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-190 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-200 Repealed. See Disposition Table at beginning of this chapter.

PART TWO--WATER SUPPLY WELLS

WAC 173-160-205 Location of well site and access requirements. The proposed water supply well should be located on high ground consistent with the general terrain. It shall be protected from a one hundred year flood and from any surface or subsurface drainage capable of impairing the quality of the ground water supply. The well shall be located away from possible sources of contamination. Well design shall consider porosity and permeability of the soil, adjacent land uses, local ground water conditions and end use of the well. When a well is located in an area of known or suspected contamination, the well casing shall be impervious to the contaminants and shall not interconnect aquifers.

When a well is constructed adjacent to a building, it shall be located where the centerline of the well extended vertically will clear any projection from the building by at least five feet.

After construction, the water well contractor or operator should strongly emphasize to the well owner, the importance of retaining good accessibility to the well to permit future inspection and maintenance.

(1) Public water supply wells. Before construction begins, site approval must be obtained from the department of social and health services, or the local health authority. The requirements of the state board of health regulation regarding public water supplies (chapter 248-54 WAC) shall apply. This regulation includes requirements for zones of protection, location of the well, accessibility features, and certain construction requirements.

(2) Individual domestic, irrigation, industrial and other wells. Wells shall not be located within certain minimum distances of potential sources of contamination. These minimum distances shall comply with local and state health regulations. Wells shall be located at least one hundred feet from a sewer line, sewage or manure lagoon, pipeline, or known, or suspected source of contamination. Wells shall not be located within one thousand feet of solid waste landfills.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-205, filed 4/6/88.]

WAC 173-160-210 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-215 Design and construction—Well completion—General. The well may be completed with

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shall be of sufficient strength to withstand the forces to which they are subjected during and after construction. It is the well drillers or designers responsibility to advise the owner or his representative of the most appropriate method of completion. Wells shall be completed in a manner which prevents the production of inordinate amounts of sand or turbid water.

(1) **Standard open bottom completion.** Open bottom completion is appropriate only where the withdrawn waters are essentially free of sand, silt and turbidity.

(2) **Perforated pipe completion.** Perforated pipe completion is suitable only for a coarse–grained, permeable aquifer where the withdrawn waters are free of excessive sand, silt or turbidity.

Perforations above the static water level are not permitted. Wells may be completed with perforations as follows:

(a) In–place perforations with Star, Mills knife, or similar type perforators.

(b) Perforated pipe liners, either sawcut, torch–cut, mill–slotted, or punched. Such liners may be of steel, plastic or other suitable corrosion–resistant material, but if other than steel, a full evaluation of the structural stability of the liner must be made prior to its placement. They may be used in a natural development or gravel–packed type construction. The use of perforated casing for working casing as the hole is being drilled is prohibited, except in those cases where the contractor can, through personal experience in the particular area of drilling, attest to the sufficiency of the preperforated casing in all respects for the specific well being constructed.

(3) **Well screens.** Well screens (and well points) shall be constructed of one type of corrosion–resistant material. A neoprene, or lead packer or grout seal shall be fitted to the top of the well screen assembly. The bottom of the well screen shall be plugged or capped.

(4) **Alignment.** A completed well must be so constructed that the drill hole and/or installed casing does not deviate from an alignment that would allow a twenty foot dummy section of pipe of no more than one diameter size smaller than the casing liner or drilled hole to be inserted to the bottom of the well without binding. Minimum specifications for casing sizes for various ranges in well yield or pumping rate are shown under WAC 173–160–235.

(1) Minimum specifications for steel casing and pipe for driven wells are contained in Table 1:

<table>
<thead>
<tr>
<th>NOMINAL SIZE (inches)</th>
<th>OUTSIDE DIAMETER (inches)</th>
<th>WALL THICKNESS (inches)</th>
<th>WEIGHT PER FOOT (pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4</td>
<td>1.660</td>
<td>0.140</td>
<td>2.27</td>
</tr>
<tr>
<td>1/2</td>
<td>1.900</td>
<td>0.145</td>
<td>2.72</td>
</tr>
<tr>
<td>2</td>
<td>2.375</td>
<td>0.154</td>
<td>3.65</td>
</tr>
<tr>
<td>2 1/2</td>
<td>2.875</td>
<td>0.203</td>
<td>5.79</td>
</tr>
<tr>
<td>3</td>
<td>3.500</td>
<td>0.216</td>
<td>7.58</td>
</tr>
<tr>
<td>3 1/2</td>
<td>4.000</td>
<td>0.226</td>
<td>9.11</td>
</tr>
<tr>
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<tr>
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<td>5.563</td>
<td>0.258</td>
<td>14.62</td>
</tr>
<tr>
<td>6</td>
<td>6.625</td>
<td>0.250</td>
<td>17.02</td>
</tr>
<tr>
<td>8</td>
<td>8.625</td>
<td>0.250</td>
<td>22.36</td>
</tr>
<tr>
<td>10</td>
<td>10.750</td>
<td>0.250</td>
<td>28.04</td>
</tr>
<tr>
<td>12</td>
<td>12.750</td>
<td>0.250</td>
<td>33.38</td>
</tr>
<tr>
<td>14</td>
<td>14.000</td>
<td>0.312</td>
<td>45.61</td>
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<tr>
<td>16</td>
<td>16.000</td>
<td>0.344</td>
<td>62.85</td>
</tr>
<tr>
<td>18</td>
<td>18.000</td>
<td>0.375</td>
<td>70.59</td>
</tr>
<tr>
<td>20</td>
<td>20.000</td>
<td>0.375</td>
<td>78.60</td>
</tr>
</tbody>
</table>

Casing larger than twenty inches shall have a minimum wall thickness of 0.375 inches.

Casings shall be new or, in like–new condition, where the only previous contact was with water, and be structurally sound. When casing lengths are joined together, they shall be connected by watertight welded or screw coupled joints. Welded joints shall be at least as thick as the wall thickness of the well casing and be fully penetrating.

(2) **Plastic casing.** Plastic, fiberglass, PVC, SR, ABS, or other type of well casing shall be manufactured and installed to conform with ANSI/ASTM F 480–81, Standard Dimension Ratio (SDR) 21 or the most recent revision.

SDR 21 is the minimum requirement; higher pressure rated pipe may be used. All plastic casing shall be installed only in an oversized drill hole without driving.

Plastic casing for use in potable water supplies shall be manufactured to conform to be acceptable to National Sanitation Foundation (NSF) Standard 14–84, or the most recent revision.

(3) **Plastic casing joints shall be watertight.** Either "bell" type, threaded joints, or coupling hubs are approved. Hub couplings shall be of material meeting the specifications for plastic casings as stipulated in subsection (2) of this section. If joints are secured with solvent cement it shall be done in accordance with manufacturers directions. Table 2A is the manufacturer’s recommendations for specifications of plastic casing.

<table>
<thead>
<tr>
<th>NOMINAL CASING DIAMETER (inches)</th>
<th>MINIMUM THICKNESS (inches)</th>
<th>SDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0.133</td>
<td>21</td>
</tr>
<tr>
<td>2.5</td>
<td>0.137</td>
<td>21</td>
</tr>
<tr>
<td>3</td>
<td>0.167</td>
<td>21</td>
</tr>
<tr>
<td>3.5</td>
<td>0.190</td>
<td>21</td>
</tr>
<tr>
<td>4</td>
<td>0.214</td>
<td>21</td>
</tr>
<tr>
<td>4.5</td>
<td>0.236</td>
<td>21</td>
</tr>
</tbody>
</table>


WAC 173–160–220 Repealed. See Disposition Table at beginning of this chapter.

WAC 173–160–225 Design and construction—Casing. Proper casing shall be installed in all water supply wells. The casing shall withstand the normal forces which act upon it during and after installation. It shall be resistant to the corrosive effects of enclosing rocks, earth and water. Unless prior approval is obtained from the department, materials for well casings shall be as specified hereunder:

[1988 WAC Supp—page 398]
(4) Liner pipe shall consist of steel, in new or like-new condition, being free of pits or breaks; or polyvinyl chloride (PVC), SR, ABS, type 1220, 1120, or SDR 21 (Class 200).

Liner pipe shall be of sufficient strength to withstand breakage or collapse when the well is pumped. When installed, liner pipe shall extend or telescope at least two feet into the lower end of the well casing. If more than one string of liner pipe is installed, each string shall extend or telescope at least eight feet into the adjacent larger diameter liner pipe. Liner pipe shall not be permanently fixed to a well casing below land surface except by placement of cement grout, packers, or similar sealing materials in the annular space between the liner and well casing.

(5) Poured concrete casing shall:

(a) Consist of clean, hard and durable aggregate with not less than five sacks of portland cement per cubic yard of concrete. The maximum diameter of aggregate particles shall not exceed 1 1/2 inches, but in any case shall not exceed 1/5 the minimum width of the casing thickness. The ratio of coarse aggregate to fine aggregate (passing No. 4 U.S. Standard Sieve) shall be approximately 1 1/2 to 1 by volume, but in any case, shall not exceed 2 to 1 nor be less than 1 to 2.

(b) Be at least six inches thick and free of voids. The walls shall be poured in one continuous operation.

[WAC 173-160-245 Repealed. See Disposition Table at beginning of this chapter.]

WAC 173-160-230 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-235 Recommended well diameters.

<table>
<thead>
<tr>
<th>Anticipated Well Yield, in gpm</th>
<th>Nominal Size of Pump Bowls, in inches</th>
<th>Optimum Size of Well Casing, in inches</th>
<th>Smallest Size of Well Casing, in inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 100</td>
<td>4</td>
<td>6 ID</td>
<td>5 ID</td>
</tr>
<tr>
<td>75 to 175</td>
<td>5</td>
<td>8 ID</td>
<td>6 ID</td>
</tr>
<tr>
<td>150 to 350</td>
<td>6</td>
<td>10 ID</td>
<td>8 ID</td>
</tr>
<tr>
<td>300 to 700</td>
<td>8</td>
<td>12 ID</td>
<td>10 ID</td>
</tr>
<tr>
<td>500 to 1000</td>
<td>10</td>
<td>14 OD</td>
<td>12 ID</td>
</tr>
<tr>
<td>800 to 1800</td>
<td>12</td>
<td>16 OD</td>
<td>14 OD</td>
</tr>
<tr>
<td>1200 to 3000</td>
<td>14</td>
<td>20 OD</td>
<td>16 OD</td>
</tr>
<tr>
<td>2000 to 3800</td>
<td>16</td>
<td>24 OD</td>
<td>20 OD</td>
</tr>
<tr>
<td>3000 to 6000</td>
<td>20</td>
<td>30 OD</td>
<td>24 OD</td>
</tr>
</tbody>
</table>

WAC 173-160-240 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-245 Design and construction—Sealing materials. (1) Puddling clay shall consist of any stable, fine-grained (0.5 mm – 1 mm), impervious material and at least fifty percent bentonite, by volume, which is capable of providing a permanent water tight seal between the casing and formation throughout the required sealing depth.

(2) Cement grout (neat cement) shall consist of either portland cement or quick setting cement mixed with not more than six gallons of water per sack of cement. Up to five percent bentonite clay, by weight, may be added to improve flow qualities and compound for shrinkage. When bentonite slurry is used to seal a well, it shall conform to the requirements of subsection (4) of this section.

(3) Pelletized, granulated, or chip bentonite may be used where bridging will not occur.

(4) Bentonites used to prepare puddling clay, or slurries for sealing shall be specifically designed for this purpose.

[WAC 173-160-250 Repealed. See Disposition Table at beginning of this chapter.]

WAC 173-160-255 Design and construction—Sealing of consolidated formations. In drilled wells that penetrate an aquifer either within or overlain by a consolidated formation, sealing of the casing shall conform with one of the following procedures.

(1) An upper drill hole at least four inches greater in diameter than the nominal size of the permanent well casing shall extend from land surface to at least five feet into sound, unfractured, consolidated formation.

Unperforated permanent casing shall be installed to extend to this same depth and the lower part of the casing shall be sealed into the consolidated formation with cement grout. The remainder of the annular space to land surface shall be filled with cement grout, puddling clay, or bentonite. See Figure 1A.

If cement grout is placed by pumping to seal the entire annulus from the bottom up to land surface, the upper drill hole need only be a minimum of two inches larger than the outside diameter of the permanent casing.

(2) An upper drill hole at least four inches greater in diameter than the nominal size of the permanent casing shall extend from land surface to a depth of at least eighteen feet. An unperforated permanent casing shall be installed so that it extends at least five feet into sound, unfractured, consolidated formation.

Throughout the driving of the well casing to the consolidated formation, the annular space between the upper drill hole and the permanent casing shall be kept at least one-half full with granular bentonite, or bentonite slurry.

The annular space between the consolidated formation and the permanent casing shall be tightly sealed with cement grout. The remainder of the annular space to
land surface shall then be filled with cement grout, puddling clay, or bentonite. See Figure 1B.

(3) If temporary surface casing is used in either of the procedures in subsection (1) or (2) of this section, this casing shall be of sufficient diameter to conform to the upper drill hole specifications. Withdrawal of the temporary casing shall take place simultaneously with proper sealing of the annular space to land surface.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-255, filed 4/6/88.]

WAC 173-160-260 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-265 Sealing of unconsolidated formations without significant clay beds. In drilled wells that penetrate an aquifer overlain by unconsolidated formations such as sand and gravel without significant (at least six feet thick) clay beds, an unperforated well casing shall extend to at least one foot below the water table. An upper drill hole having a diameter at least four inches greater than the nominal size of the permanent casing shall be installed to at least eighteen feet below land surface.

The annular space between the upper drill hole and the well casing shall be kept at least one-half full with granular bentonite or bentonite slurry throughout the driving of the permanent casing into the aquifer. After the permanent casing is set in its final position, the remaining annular space shall be filled to land surface with cement grout, puddling clay, or bentonite. See Figure 2A.

If temporary surface casing is installed to the same depth as the permanent casing, a watertight packer shall be installed between the permanent casing and the drill hole at a position directly above the production aquifer. The remaining annular space shall be completely filled and sealed to land surface with cement grout, puddling clay, or bentonite as the temporary surface casing is withdrawn. See Figure 2B.

WAC 173-160-270 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-275 Sealing of unconsolidated formations with clay beds. In drilled wells that penetrate an aquifer overlain by clay or other unconsolidated deposits such as sand and gravel in which significant (at least six feet thick) interbeds of clay are present, the well casing may be terminated in such clay strata, provided that the casing be sealed in substantially the same manner as is required in the case of consolidated formations (see WAC 173-160-255 and Figure 2C at the end of this chapter).

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-275, filed 4/6/88.]

WAC 173-160-280 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-285 Special sealing standards for artesian wells. When artesian water is encountered in the well, an unperforated well casing shall extend into the confining stratum overlying the artesian zone. The casing shall be sealed into the confining stratum to prevent surface and subsurface leakage from the artesian zone. If the well flows at land surface, it shall be equipped with a control valve so flow can be completely stopped. The well shall be completed with seals, packers or grout that eliminates leakage around the well casing. The driller shall not move the drilling rig from the well site until leakage is completely stopped unless authority for

[1988 WAC Supp—page 400]
temporary removal is granted by the department, or when loss of life or property is imminent.

WAC 173-160-290 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-295 Artificial gravel-packed wells—General. In gravel-packed wells, the gravel mixture shall be placed around the screen so that bridging or size separation does not occur. The gravel pack shall be clean, and chemically stable. All gravel and water used shall be disinfected in at least fifty parts per million (ppm) chlorine with a contact time of at least thirty minutes. Rinse water containing chlorine is a pollutant. Chlorine in the rinse water shall be allowed to dissipate and discharged in a safe manner consistent with the intent of the Water Pollution Control Act, chapter 90.48 RCW.

WAC 173-160-300 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-305 Sealing of artificial gravel-packed wells. (1) Permanent surface casing not installed. An upper drill hole having a diameter of at least four inches greater than the outside diameter of the production casing shall be drilled to extend from land surface into a clay or other formation of low permeability overlying the water-bearing zone. If the upper drill hole will not remain open throughout construction of the well, a temporary surface casing must be installed to this depth to maintain the annular space. The annular space to this depth shall be filled with cement grout, puddling clay, or bentonite. If the clay or other impermeable formation is at or near land surface, the upper drill hole and unperforated production casing shall extend to a minimum depth of eighteen feet below land surface. Sealing procedures, installation of gravel fill pipes and temporary casing are substantially the same as in subsections (1) and (2) of this section.

(2) Permanent surface casing installed. When permanent surface casing is installed, the well bore shall have a diameter at least four inches greater than the surface casing for the introduction of sealing materials. A watertight seal shall be installed at the top of the gravel pack between the permanent surface and production casing. Sealing procedures and installation of gravel fill pipes are substantially the same as in subsection (1) of this section. If the upper drill hole will not remain open throughout construction of the well, a temporary casing must be used to maintain the oversized drill hole. The annular space to be sealed under conditions of subsections (1) and (2) of this section shall be kept full with cement grout, puddling clay, or bentonite as the temporary casing is withdrawn. See Figure 3B.

(3) If a clay layer or other formation of low permeability is not encountered before reaching the top of the water-bearing zone, the upper drill hole and unperforated production casing shall extend to a minimum depth of eighteen feet below land surface. Sealing procedures, installation of gravel fill pipes and temporary casing are substantially the same as in subsections (1) and (2) of this section.

WAC 173-160-310 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-315 Sealing of dug wells. The surface curbing of all dug wells shall be constructed to effectively seal the annular space between the undisturbed native material of the upper well hole and the concrete tile, steel pipe, or liner to a depth of at least eighteen feet or within three feet of the bottom in wells that are less than twenty-one feet in depth.

(1) In all dug wells, other than a buried slab type, concrete at least six inches thick shall be used as sealing material. If wooden cribbing is used as a retaining wall to provide for a concrete surface curbing, the cribbing shall be removed from the hole after the concrete has set.

(2) In buried slab type well construction, a steel casing shall extend at least six inches beyond the slab into the lower well hole; the buried slab shall be sealed with cement grout and the remaining annular space to land surface shall be filled with bentonite or puddled clay. See Figure 4.

WAC 173-160-320 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-325 Special standards for driven or jetted wells. In all driven point wells, the casing shall extend at least five feet below the anticipated pumping

[1988 WAC Supp—page 401]
level. An upper hole at least four inches greater in diameter than the permanent casing shall extend a minimum of six feet below land surface. The annular space between the upper oversized drill hole and the permanent casing shall be kept at least one-half full with bentonite slurry throughout all driving of the pipe. The remaining annular space to land surface shall be filled with cement grout, pudding clay, or bentonite. See Figure 5.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-325, filed 4/6/88.]

WAC 173-160-330 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-335 Upper terminal of well. The watertight casing or curbing of any well shall extend at least six inches above the ground surface. In the case of public water supplies where the site is not subject to flooding, the pumphouse floor must be at least one foot above land surface, with a minimum of six inches of casing projecting above the floor; where the site is subject to flooding, the pumphouse floor must be at least two feet above the estimated water level of a one hundred-year frequency flood. Any vent opening, observation ports or air-line equipment shall extend from the upper end of the well by watertight piping to a point at least one foot above the pumphouse floor or cover installed above ground surface. The terminals of these facilities shall be shielded or sealed to prevent entrance of foreign matter or pollutants. A pitless adaptor, or similar device is permitted on domestic wells if made with approved fittings or accepted welding procedures. The connection must be above static water level. The pump location must not be subject to flooding.

[1988 WAC Supp—page 402]
WAC 173-160-340 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-345 Testing of well. (1) Well authorized by appropriation permit. Before being put to use, each well shall be pump tested for yield and drawdown and reports submitted as required in chapter 90.44 RCW. The well shall be test pumped at rates equal to or greater than are expected from the well during its normal usage. For public water supply wells, the test pump shall be operated continuously for a minimum of four hours, or longer if required by the department of social and health services. The yield and drawdown shall be determined following at least two hours of stabilized water level observation. Periodic water level observation should be made during drawdown and subsequent recovery periods. Periods of observation shall be more frequent during the onset of drawdown and may decrease in frequency as drawdown or recovery proceeds toward stabilization. A bailer test is not an acceptable substitute for testing wells under permit.

(2) Wells not requiring appropriation permit. Testing of a well not requiring an appropriation permit shall be conducted for a period of at least one hour either by bailer, air lift, or with a pump.

(3) Test data must be reported to the department in the water well report.

WAC 173-160-350 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-355 Testing of well—Access port or pressure gage. All wells shall be equipped with an access port that allows for the measurement of the depth to water surface or a pressure gage that indicates the shut-in pressure of a flowing artesian well. See Figure 6. The access ports and pressure gages or other openings in the cover shall be sealed or capped to prevent entrance of surface water or foreign material into the well.

![Figure 5: Sealing of Driven and Jetted Wells](image1)

**Figure 5. Sealing of Driven and Jetted Wells**

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-335, filed 4/6/88.]

WAC 173-160-360 Repealed. See Disposition Table at beginning of this chapter.
WAC 173-160-365 Disinfection. (1) All tools and drilling equipment shall be thoroughly disinfected with a chlorine compound prior to beginning well construction.

(2) Every new or reconditioned well, after completion of construction or repair, and before being placed in service, shall be cleared of all foreign materials.

(3) The well casing shall be swabbed and cleaned to remove oil, grease or joint dope.

(4) All pumping equipment, sand or gravel used in gravel-packed wells and the well casing shall be thoroughly sluiced with clean water and disinfected with a solution containing at least fifty ppm of chlorine for at least thirty minutes.

(5) Prior to use for drinking purposes, sufficient disinfectant (chlorine compound) shall be added to the standing water in the well to give a residual of fifty ppm free chlorine. The disinfectant should then be thoroughly mixed with the water in the well and shall remain in the well for a period of at least twenty-four hours, after which there shall remain a minimum of ten ppm free chlorine residual. The well shall then be flushed to remove all traces of chlorine. If testing indicates a presence of coliform bacteria, more stringent disinfection methods may be required by the department of social and health services or local health authority.

(6) Chlorine is a pollutant. Allow the chlorine in the rinse to dissipate before discharging the water to surface water. This water shall be discharged in a safe manner consistent with the intent of the Water Pollution Control Act, chapter 90.48 RCW.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-365, filed 4/6/88.]

WAC 173-160-370 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-375 Quality of drilling water. All water introduced into a well for drilling purposes shall be obtained from a potable water source or be thoroughly disinfected to assure noncontamination of the water-bearing zone.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-375, filed 4/6/88.]

WAC 173-160-380 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-160-385 Pump installation. All pumps and pumping equipment shall be installed in a manner consistent with the intent and purposes of these regulations.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-385, filed 4/6/88.]

WAC 173-160-395 Explosives. The use of explosives in the construction, development or reconditioning of any water well shall be accomplished under the direct supervision of an individual licensed under chapter 70.74 RCW.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-395, filed 4/6/88.]

1988 WAC Supp—page 404
WAC 173-160-435 Abandonment of wells—Abandonment of gravel-packed wells. All gravel-packed wells shall be pressure-grouted throughout the perforated section of the well casing. The remainder of the well shall be filled with cement grout, concrete, puddled clay, or bentonite.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-435, filed 4/6/88.]

WAC 173-160-445 Abandonment of wells—Abandonment of artesian wells. A cement grout or concrete plug shall be placed in the confining stratum overlying the artesian zone to prevent subsurface leakage from the artesian zone. The remainder of the well shall be filled with cement grout, concrete, or bentonite.


WAC 173-160-455 Abandonment of wells—Abandonment of dug wells. Clean chlorinated sand shall be installed to a point two feet above static water level. The remainder of the well to land surface shall be filled with clay, concrete, puddled clay, or bentonite.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-455, filed 4/6/88.]

WAC 173-160-465 Abandonment of wells—Plugging of test wells. In the abandonment of cased wells in which the well casing is to be removed, the well shall be plugged as the casing is withdrawn. Test wells shall be abandoned in accordance with WAC 173-160-420.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-465, filed 4/6/88.]

WAC 173-160-475 Artificial recharge of ground-water bodies. Approval must be obtained from the department before starting any project related to the artificial recharge of ground-water bodies.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-475, filed 4/6/88.]

PART THREE—RESOURCE PROTECTION WELLS

WAC 173-160-500 Design and construction—General. (1) No resource protection well shall be used for domestic, industrial, commercial, or agricultural purposes, unless it meets the minimum construction standards for water supply wells.

(2) No resource protection well shall interconnect saturated formations or aquifers.

(3) Cuttings and development water shall be managed in a manner consistent with the intent and purposes of the Water Pollution Control Act, chapter 90.48 RCW, the Hazardous Waste Management Act, chapter 70.105 RCW, and implementing regulations (chapter 173-303 WAC).

(4) A well identification number shall be permanently attached or engraved on the inner and outer well casings.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-500, filed 4/6/88.]

WAC 173-160-510 Design and construction—Surface protective measures. (1) Every resource protection well shall be capped and protected using one of the following methods:

(a) If the well is cased with metal and completed above the ground surface, a lockable cap shall be attached to the top of the casing.

(b) If the well is not cased with metal and completed above the ground surface, a metal protective casing shall be installed around the well. The protective casing shall extend at least six inches above the top of the well casing and at least two feet into the ground. A lockable cap shall be attached to the top of the protective casing.

(c) If the well is completed below ground surface, a lockable "water-meter cover," or equivalent, shall be installed around the well. A protective cover, level with the ground surface, shall be installed with a waterproof seal to prevent the inflow of surface water. Drains shall be provided, when feasible, to keep water out of the well and below the well cap. The cover must be designed to withstand the maximum expected loadings.

(2) The well(s), completed above ground, shall be protected from damage by one of the following methods:

(a) Three metal posts at least three inches in diameter, and set in concrete, shall be installed in a triangular array around the casing and at least two feet from it. Each post shall extend at least three feet above and below the ground surface.

(b) A reinforced concrete pad may be installed to prevent freeze/thaw cracking of the surface seal. When a concrete pad is used, the well seal shall be part of the concrete pad.

(c) A protective cover shall be installed when the well is completed below the ground surface. The cover must be designed to withstand the maximum expected loadings.

(3) The protective measures may be waived, if the well is inspected at least weekly and is located in a secure area that is not susceptible to vandalism or to damage.

(4) If the well is to be protected by other surface protection methods, the owner shall obtain prior written approval from the department.

(5) If the well is damaged, the well protection measures and casing shall be restored as prescribed by this chapter. If the well is damaged beyond repair, it shall be properly plugged and abandoned in accordance with WAC 173-160-560.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-510, filed 4/6/88.]

WAC 173-160-520 Design and construction—Casing. The casing shall be nonreactive with the subsurface environment. The casing shall not effect or interfere with the chemical, physical, radiological, or biological constituents of interest. All resource protection well casing shall conform to ASTM Standards, or at least 304 or 316 stainless steel, PTFE, or Schedule 40 PVC casing. Glued casing joints shall not be used in areas of known or potential contamination.

[1988 WAC Supp—page 405]
WAC 173-160-530 Design and construction—Cleaning. (1) When drilling in known or potential areas of contamination, the drill rig derrick and all drilling equipment shall be steam cleaned before and after well construction.

(2) The casing and screen(s) shall be steam cleaned and rinsed before installation, and stored off the ground on secure clean racks.

(3) The filter pack shall be washed with clean water before installation and shall not interfere with the chemical, physical, radiological, or biological constituents of interest.

WAC 173-160-540 Design and construction—Well screen, filter pack, and development. (See Figure 7 at the end of this section.) (1) Wells installed for water quality sampling shall include the following:

(a) Commercially fabricated screen. The well screen shall be constructed of material that is nonreactive to subsurface conditions.

(b) Filter pack. A filter pack is preferred, but not required in coarse or granular formations. When used, it shall be installed from the bottom of the screen to at least three feet above the top of the screen.

(2) Well development. The well shall be developed to assure continuity between the well, well screen, and formation materials.

WAC 173-160-550 Design and construction—Well seals. (1) A layer of bentonite at least two feet thick shall be placed on top of the filter pack. Figure 7 illustrates the well construction.

(2) The annular space shall be grouted with bentonite; or a bentonite-cement sealant, which has a weight in the range of eleven to thirteen pounds per gallon as verified on site, with a mud balance. Monitoring wells designed to retain the outer casing shall be sealed into the first impermeable layer. The sealant shall be installed with a tremie tube from the bottom up. Use only potable water to hydrate the mixture.

(3) Other methods may be used to seal the annular space, if they provide equivalent protection, and a variance has been issued by the department.

WAC 173-160-560 Abandonment of resource protection wells. (1) If it can be verified that a resource protection well was constructed in accordance with these regulations, it shall be abandoned by filling the casing from the bottom to the surface with grout or bentonite. If the construction cannot be verified, the well shall be abandoned in accordance with WAC 173-160-415(2).

(2) The abandonment procedure shall be recorded on a form provided by the department and shall include, as
a minimum, the following information: Project name, if appropriate; date; location of well by 1/4, 1/4, section or smallest legal subdivision; well identification number; use of well; method of setting the plug; type and amount of sealant used; and such additional information as required by the department.

(3) The well abandonment must be recorded and reported to the department within thirty days of abandonment.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-160-560, filed 4/6/88.]

**Chapter 173-162 WAC**

**REGULATION AND LICENSING OF WELL CONTRACTORS AND OPERATORS**

**WAC**

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173-162-030 Definitions.


173-162-050 Exemptions.

173-162-060 License required—Qualifications for licensing.

173-162-100 Examinations—Type of examinations.

173-162-110 Repealed.

173-162-130 Licenses—General.

173-162-140 Licenses—Conditional license.

173-162-150 Repealed.

173-162-160 Repealed.

173-162-170 Retaking examination.

173-162-180 Repealed.

173-162-190 Well contractors—Responsibilities.

173-162-200 Enforcement.

173-162-210 Appeals.

173-162-220 Regulation review.

**DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER**


**WAC 173-162-010 Purpose.** These regulations are adopted pursuant to chapter 18.104 RCW in order to establish procedures for the examination, licensing and regulation of well contractors and operators.


**WAC 173-162-020 General.** These regulations are applicable to all well contractors and operators who are contracting for well construction or constructing wells in the state of Washington.


**WAC 173-162-030 Definitions.** As used in this chapter:

(1) "Constructing a well" or "construct a well" means and includes boring, digging, drilling, or excavating and installing casing, lining or well screens, whether in the installation of a new well or the alteration of an existing well.

(2) "Department" means department of ecology.

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

(4) "Drilled well" is a well which is usually excavated by mechanical means such as rotary, cable tool, or auger rigs.

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

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

(7) "Licensee" is any person licensed as a well contractor pursuant to the provisions of this act and these rules.

(8) "Liner" means any casing, screen, or other device inserted into a larger casing, screen, or bore hole as a means of sealing off undesirable material or maintaining the structural integrity of the well.

(9) "Landfill gas extraction well" is a well used to withdraw gas from an unsaturated zone.

(10) "Monitoring well" is a well designed to obtain a representative ground water sample and/or to measure the water level over the screened interval.

(11) "Observation well" is a well designed to measure the depth to the water table. An observation well is screened across the water table and usually is installed in unconfined aquifers.

(12) "Operator" is any person employed by a well contractor or self employed as a contractor operator for the control and supervision of well construction and for the operation of well construction equipment.

(13) "Piezometer well" is a well designed to measure the hydraulic potential (water level elevation) at a specific point in the subsurface. A piezometer has a short screen that is positioned entirely beneath the water table.

(14) "Resource protection wells" mean monitoring wells, observation wells, piezometers and spill response wells, and cased geotechnical test borings.

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

(16) "Supervision" or "supervising" means being present at the site of well construction and responsible for proper construction at any and all times well construction equipment is being operated.

(17) "Water supply well" means any well that is used to withdraw, dewater, or recharge ground water.
(18) "Well" means and includes any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed when the intended use of an excavation is for the location, diversion, artificial recharge or withdrawal of ground water. Well includes water-supply well and resource protection well. Well does not mean excavations excluded in WAC 173-160-010(3).

(19) "Well contractor" means any person, firm, partnership, copartnership, corporation, association, or other entity engaged in the business of constructing wells.

(20) "Well rig" is any power driven, percussion, rotary, boring, digging, jetting, or augering machine used in the construction of a well.


WAC 173-162-040 Compliance—Requirement for licensing. (1) A well construction operators license is required for all operators.

(2) A well construction operators license is required for all well contractors as follows:

(a) Every well contractor shall designate one official as "liaison representative" who shall have the full responsibility and authority to act as the contractor's agent in all its dealings with the department. The "liaison representative" shall be licensed.

(b) An owner-operator who enters contracts on his own behalf is a well contractor and must be licensed. He shall act as his own "liaison agent" in all dealings with the department.

(3) An architectural, engineering or other similar type professional consulting firm, general contractor or construction firm and highway or bridge construction firm need not have a licensed well construction operator in its employ; provided that all well construction associated with their various projects is conducted by a duly licensed well contractor.


WAC 173-162-050 Exemptions. A well construction operators license shall not be required of:

(1) Any individual who personally drills a well on land which is owned or leased by him or in which he has a beneficial interest as a contract purchaser and is used by the individual for farm or noncommercial domestic use only.

(2) Any individual who performs labor or services for a well contractor in connection with the drilling of a well at the direction and under on-site supervision and control of a licensed operator.


WAC 173-162-060 License required—Qualifications for licensing. A person shall be qualified to receive a license if he:

(1) Has made application to the department and has paid a twenty-five dollar application fee.

(2) Has passed a written examination, except that a person who can establish his illiteracy to the satisfaction of the department shall be entitled to an oral examination in lieu of a written examination.

(3) Has at least two years of field experience with a licensed well driller or one year of field experience and an equivalent of at least one school year of qualifying educational training. The qualifying educational training should include the following studies, in combination with field demonstration and experience for the minimum amount of hours shown:

(a) Ground water geology and hydrology—fifty-five hours;

(b) Well design and construction—fifty-five hours;

(c) Records and business basics—twenty-two hours;

(d) History of methods of drilling—twenty-two hours;

(e) Welding—one hundred ten hours; and

(f) Well drilling experience—four hundred fifty-nine hours.

These criteria must have official documentation by state or nationally approved institutions of higher learning.


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

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

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

(3) Types of well construction;

(4) Drilling tools and equipment;

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

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

(7) Preparation of well reports;

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

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

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

WAC 173-162-110 Repealed. See Disposition Table at beginning of this chapter.

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


WAC 173-162-140 Licenses—Unconditional license. An applicant who has passed the basic general examination and all specialist categories shall be granted a well construction operators license without any restrictions or conditions.


WAC 173-162-150 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-162-160 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-162-170 Retaking examination. Upon failing to qualify for a license, the applicant shall not be entitled to retake the examination or any parts thereof for a period of ninety days from the date of his original examination.

(1) An applicant who has failed to pass the basic general category or has passed the basic general category, but failed to pass any of the specialist categories, shall be considered as a new applicant in all respects.

(2) An applicant who has qualified for a license in one or more of the specialist categories will not be required to pay additional fees for retaking only a part of the examination.


WAC 173-162-180 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-162-190 Well contractors—Responsibilities. The well contractor shall be responsible for appointment of a "liaison representative." Any change of "liaison representative" must be immediately reported to the department in order to assure continuity of communication.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-162-190, filed 4/6/88; Order DE 73-10, § 173-162-190, filed 6/29/73.]

WAC 173-162-200 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as are appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190, civil penalties under RCW 90.03.600 and 18.104.155, and criminal penalties under RCW 18.104.160.

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

WAC 173-162-210 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapter 18.104 RCW. 88-08-070 (Order 88-58), § 173-162-210, filed 4/6/88.]

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

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

Chapter 173-164 WAC

WATER RATE CHARGES


WAC 173-164-050 Determination of rate. Each irrigation season, the director shall determine the rate of payment per acre-foot of water per project, based on recovery of capital costs, type of crop, and ability to repay. For the 1981 irrigation season, the director has determined that the rate of charge for water from the irrigation well located in the NW 1/4, SE 1/4, Sec. 6, T9N, R25E, shall be forty-five dollars per acre-foot of water. An additional charge for water delivered under pressure based on the vertical distance (discharge head) from pump to point of discharge will be in accordance with the following rate table:

<table>
<thead>
<tr>
<th>Discharge Head from Pump (feet)</th>
<th>Price per Acre-foot</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 10</td>
<td>$0.70</td>
</tr>
<tr>
<td>10 to 20</td>
<td>1.51</td>
</tr>
<tr>
<td>20 to 30</td>
<td>2.18</td>
</tr>
<tr>
<td>30 to 40</td>
<td>2.95</td>
</tr>
<tr>
<td>40 to 50</td>
<td>3.67</td>
</tr>
<tr>
<td>50 to 60</td>
<td>4.90</td>
</tr>
<tr>
<td>60 to 70</td>
<td>5.15</td>
</tr>
<tr>
<td>70 to 80</td>
<td>5.93</td>
</tr>
<tr>
<td>80 to 90</td>
<td>6.63</td>
</tr>
<tr>
<td>90 to 100</td>
<td>7.35</td>
</tr>
<tr>
<td>100 to 110</td>
<td>8.10</td>
</tr>
<tr>
<td>110 to 120</td>
<td>8.84</td>
</tr>
<tr>
<td>120 to 130</td>
<td>9.58</td>
</tr>
<tr>
<td>130 to 140</td>
<td>10.32</td>
</tr>
<tr>
<td>140 to 150</td>
<td>11.06</td>
</tr>
</tbody>
</table>

WAC 173-164-080 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.83B and 43.27A RCW. 88-13-037 (Order 88-11), § 173-164-080, filed 6/9/88.]

Chapter 173-166 WAC EMERGENCY WATER WITHDRAWAL FACILITIES

WAC 173-166-070 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.83B and 43.27A RCW. 88-13-037 (Order 88-11), § 173-164-080, filed 6/9/88.]

Chapter 173-201 WAC WATER QUALITY STANDARDS FOR SURFACE WATERS OF THE STATE OF WASHINGTON

WAC 173-201-010 Introduction. (1) The purpose of this chapter is to establish water quality standards for surface waters of the state of Washington consistent with public health and public enjoyment thereof, and the propagation and protection of fish, shellfish, and wildlife, pursuant to the provisions of chapter 90.48 RCW and the policies and purposes thereof.

(2) This chapter shall be reviewed periodically by the department and appropriate revisions shall be undertaken.

(3) The water use and quality criteria set forth in WAC 173-201-035 through 173-201-085 are established in conformance with present and potential water uses of the surface waters of the state of Washington and in consideration of the natural water quality potential and limitations of the same. These shall be the sole criteria for said waters.

[Statutory Authority: RCW 90.48.035 and 90.48.260, 88-02-058 (Order 87-6), § 173-201-010, filed 1/6/88. Statutory Authority: RCW 90.48.035, 82-12-078 (Order DE 82-12), § 173-201-010, filed 6/2/82; 78-02-043 (Order DE 77-32), § 173-201-010, filed 1/17/78; Order 73-4, § 173-201-010, filed 7/6/73.]

WAC 173-201-025 Definitions. (1) Background conditions: The biological, chemical, and physical conditions of a water body, upstream from the point or non-point source of any discharge under consideration. Background sampling location in an enforcement action would be upstream from the point of discharge, but not upstream from other inflows. If several discharges to any water body exist, and enforcement action is being taken for possible violations to the standards, background sampling would be undertaken immediately upstream from each discharge.

(2) Department: State of Washington department of ecology.

(3) Director: Director of the state of Washington department of ecology.

(4) Hardness: A measure of the calcium and magnesium salts present in water. For purposes of this chapter, hardness is measured in milligrams per liter as calcium carbonate (C₉₄O₇).

(5) Fecal coliform: That portion of the coliform group which is present in the intestinal tracts and feces of warm-blooded animals as detected by the product of acid or gas from lactose in a suitable culture medium within 24 hours at 44.5 plus or minus 0.2 degrees Celsius.

(6) Geometric mean: The nth root of a product of n factors.

(7) Mean detention time: The time obtained by dividing a reservoir’s mean annual minimum total storage by the 30-day ten-year low-flow from the reservoir.

(8) Permit: A document issued pursuant to RCW 90.48.160 et seq. or 90.48.260 or both, specifying the waste treatment and control requirements and waste discharge conditions.

(9) pH: The negative logarithm of the hydrogen ion concentration.

(10) Primary contact recreation: Activities where a person would have direct contact with water to the point of complete submergence, including but not limited to skin diving, swimming and water skiing.

(11) Secondary contact recreation: Activities where a person's water contact would be limited (wading or fishing) to the extent that bacterial infections of eyes, ears, respiratory or digestive systems or urogenital areas would normally be avoided.

(12) Surface waters of the state: Include lakes, rivers, ponds, streams, inland waters, saltwaters, and all other surface waters and water courses within the jurisdiction of the state of Washington.

(13) Temperature: Water temperature expressed in degrees Celsius (°C).

(14) Turbidity: The clarity of water expressed as nephelometric turbidity units (NTU) and measured with a calibrated turbidimeter.

(15) Upwelling: The annual natural phenomenon where the summer prevailing, northerly winds parallel to...
Washington's coast produce a seaward transport of surface waters. Cold, deeper more saline waters rich in nutrients and low in dissolved oxygen rise to replace the surface water. The cold, oxygen deficient water flows into Puget Sound and other coastal estuaries replacing the deep water with lower dissolved oxygen concentrations reaching the surface during late summer and fall.

(16) USEPA: United States Environmental Protection Agency.

(17) Wildlife habitat: Waters of the state used by fish, other aquatic life and wildlife for any life history stage or activity.

[WAC 173-201-035 General considerations. The following general guidelines shall apply to the water quality criteria and classifications set forth in WAC 173-201-045 through 173-201-085 hereof:

(1) At the boundary between waters of different classifications, the water quality criteria for the higher classification shall prevail.

(2) In brackish waters of estuaries, where the fresh and marine water quality criteria differ within the same classification, the criteria shall be interpolated on the basis of salinity; except that the marine water quality criteria shall apply for dissolved oxygen when the salinity is one part per thousand or greater and for fecal coliform organisms when the salinity is ten parts per thousand or greater.

(3) The water quality criteria herein established shall not apply within an authorized dilution zone adjacent to or surrounding a waste—water discharge.

(4) Waste discharge permits, whether issued pursuant to the National Pollutant Discharge Elimination System or otherwise, shall be conditioned in such manner as to authorize discharges which meet the water quality standards.

(a) However, persons discharging wastes in compliance with the terms and conditions of permits shall not be subject to civil and criminal penalties on the basis that discharge violates water quality standards.

(b) Permits shall be subject to modification by the department whenever it appears to the department that the discharge violates water quality standards. Modification of permits, as provided herein, shall be subject to review in the same manner as originally issued permits.

(5) Nonpoint sources and water quality standards.

(a) It is recognized that many activities not subject to a waste discharge permit system are now being performed in the state, which result in conflicts with the water quality standards of this chapter. Further, the department has not developed a program which, in a reasonable or fully satisfactory manner, provides methods or means for meeting such standards. Persons conducting such activities shall not be subject to civil or criminal sanctions for violation of water quality standards if the activities are either:

(i) Conducted in accordance with management practices set forth by rules of the department.

For example, promulgation of regulations by the department which set forth approved management practices or other effluent limits shall be accomplished so that activities conducted within such regulations, (i.e., forest practices rules and regulations chapter 173-202 WAC and Title 222 WAC) will achieve compliance with water pollution control laws. When the regulations are violated, the water quality standard can be enforced as described in WAC 173-201-045 through 173-201-085; or,

(ii) Subject to a regulatory order issued by the department relating to specific activities as provided for in WAC 173-201-100(2).

(b) Management practices or regulatory orders described in WAC 173-201-035(5) hereof, shall be subject to modification by the department whenever it appears to the department that the discharge violates water quality standards. Modification of management practices or regulatory orders, as provided herein, shall be subject to review in the same manner as the originally issued management practices or regulatory orders.

(6) The water quality criteria herein established for total dissolved gas shall not apply when the stream flow exceeds the 7-day, 10-year frequency flood.

(7) The total area and/or volume of a receiving water assigned to a dilution zone shall be as described in a valid discharge permit as needed and be limited to that which will:

(a) Not cause acute mortalities of sport, food, or commercial fish and shellfish species of established biological communities within populations or important species to a degree which damages the ecosystem.

(b) Not diminish aesthetic values or other beneficial uses disproportionately.

(8) The antidegradation policy of the state of Washington, as generally guided by chapter 90.48 RCW, Water Pollution Control Act, and chapter 90.54 RCW, Water Resources Act of 1971, is stated as follows:

(a) Existing beneficial uses shall be maintained and protected and no further degradation which would interfere with or become injurious to existing beneficial uses will be allowed.

(b) No degradation will be allowed of waters lying in national parks, national recreation areas, national wildlife refuges, national scenic rivers, and other areas of national ecological importance.

(c) Whenever waters are of a higher quality than the criteria assigned for said waters, the existing water quality shall be protected and waste and other materials and substances shall not be allowed to enter such waters which will reduce the existing quality thereof, except, in those instances where:

(i) It is clear that overriding considerations of the public interest will be served, and

(ii) All wastes and other materials and substances proposed for discharge into the said waters shall be provided with all known, available, and reasonable methods of treatment before discharge.

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(d) Whenever the natural conditions of said waters are of a lower quality than the criteria assigned, the natural conditions shall constitute the water quality criteria.

(e) The criteria and special conditions established in WAC 173–201–045 through 173–201–085 may be modified for a specific water body on a short-term basis when necessary to accommodate essential activities, respond to emergencies, or to otherwise protect the public interest. Such modification shall be issued in writing by the director or his/her designee subject to such terms and conditions as he/she may prescribe. The aquatic application of herbicides which result in water use restrictions shall be considered an activity for which a short-term modification generally may be issued subject to the following conditions:

(i) A request for a short-term modification shall be made to the department on forms supplied by the department. Such request generally shall be made at least thirty days prior to herbicide application.

(ii) Such herbicide application shall be in accordance with state of Washington department of agriculture regulations.

(iii) Such herbicide application shall be in accordance with USEPA label provisions promulgated by USEPA under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended. (7 U.S.C. 136, et seq.)

(iv) Notice, including identification of the herbicide, applicator, location where the herbicide will be applied, proposed timing and method of application, and water use restrictions shall be given according to the following requirements:

(A) Appropriate public notice as determined and prescribed by the director or his/her designee shall be given of any water use restrictions specified in USEPA label provisions.

(B) The appropriate regional offices of the departments of fisheries and game shall be notified twenty-four hours prior to herbicide application.

(C) In the event of any fish kills, the departments of ecology, fisheries, and game shall be notified immediately.

(v) The herbicide application shall be made at times so as to:

(A) Minimize public water use restrictions during weekends.

(B) Completely avoid public water use restrictions during the opening week of fishing season, Memorial Day weekend, July 4 weekend, and Labor Day weekend.

(vi) Any additional conditions as may be prescribed by the director or his/her designee.

(f) In no case, will any degradation of water quality be allowed if this degradation interferes with or becomes injurious to existing water uses and causes long-term harm to the environment.

(g) No waste discharge permit will be issued which violates established water quality criteria, except, as provided for under WAC 173–201–035 (8)(e).

(9) Due consideration will be given to the precision and accuracy of the sampling and analytical methods used as well as existing conditions at the time, in the application of the criteria.

(10) The analytical testing methods for these criteria shall be in accordance with the Guidelines Establishing Test Procedures for the Analysis of Pollutants (40 C.F.R. Part 136) and other or superseding methods published and/or approved by the department following consultation with adjacent states and concurrence of the USEPA.

(11) Deleterious concentrations of radioactive materials for all classes shall be as determined by the lowest practicable concentration attainable and in no case shall exceed:

(a) 1/100 of the values listed in WAC 402–24–220 (Column 2, Table II, Appendix A, rules and regulations for radiation protection); or,

(b) USEPA Drinking Water Regulations for radionuclides, as published in the Federal Register of July 9, 1976, or subsequent revisions thereto.

(12) Nothing in this chapter shall be interpreted to be applicable to those aspects of governmental regulation of radioactive wastes which have been preempted from state regulation by the Atomic Energy Act of 1954, as amended, as interpreted by the United States Supreme Court in the cases of Northern States Power Co. v. Minnesota 405 U.S. 1035 (1972) and Train v. Colorado Public Interest Research Group, 426 U.S. 1 (1976).

(13) Nothing in this chapter shall be interpreted to prohibit the establishment of effluent limitations for the control of the thermal component of any discharge in accordance with Section 316 of the Federal Clean Water Act (33 U.S.C. 1251 et seq.).


WAC 173–201–045 General water use and criteria classes. The following criteria shall apply to the various classes of surface waters in the state of Washington:

(1) **Class AA (extraordinary).**

(a) General characteristic. Water quality of this class shall markedly and uniformly exceed the requirements for all or substantially all uses.

(b) Characteristic uses. Characteristic uses shall include, but not be limited to, the following:

(i) Water supply (domestic, industrial, agricultural).

(ii) Stock watering.

(iii) Fish and shellfish: Salmonid migration, rearing, spawning, and harvesting.

Other fish migration, rearing, spawning, and harvesting.

Clam, oyster, and mussel rearing, spawning, and harvesting.

Crustaceans and other shellfish (crabs, shrimp, crayfish, scallops, etc.) rearing, spawning, and harvesting.

(iv) Wildlife habitat.

(v) Recreation (primary contact recreation, sport fishing, boating, and aesthetic enjoyment).

(vi) Commerce and navigation.
(c) Water quality criteria.

(i) Fecal coliform organisms.

(A) Freshwater – fecal coliform organisms shall not exceed a geometric mean value of 50 organisms/100 mL, with not more than 10 percent of samples exceeding 100 organisms/100 mL.

(B) Marine water – fecal coliform organisms shall not exceed a geometric mean value of 14 organisms/100 mL, with not more than 10 percent of samples exceeding 43 organisms/100 mL.

(ii) Dissolved oxygen.

(A) Freshwater – dissolved oxygen shall exceed 9.5 mg/L.

(B) Marine water – dissolved oxygen shall exceed 7.0 mg/L. When natural conditions, such as upwelling, occur, causing the dissolved oxygen to be depressed near or below 7.0 mg/L, natural dissolved oxygen levels can be degraded by up to 0.2 mg/L by man-caused activities.

(iii) Total dissolved gas shall not exceed 110 percent of saturation at any point of sample collection.

(iv) Temperature shall not exceed 16.0°C (freshwater) or 13.0°C (marine water) due to human activities. Temperature increases shall not, at any time, exceed $t = \frac{23}{(T+5)}$ (freshwater) or $t = \frac{8}{(T-4)}$ (marine water).

When natural conditions exceed 16.0°C (freshwater) and 13.0°C (marine water), no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C.

For purposes hereof, "$t$" represents the maximum permissible temperature increase measured at a dilution zone boundary; and "$T$" represents the background temperature as measured at a point or points unaffected by the discharge and representative of the highest ambient water temperature in the vicinity of the discharge.

Provided that temperature increase resulting from nonpoint source activities shall not exceed 2.8°C, and the maximum water temperature shall not exceed 16.3°C (freshwater).

(v) pH shall be within the range of 6.5 to 8.5 (freshwater) or 7.0 to 8.5 (marine water) with a man-caused variation within a range of less than 0.2 units.

(vi) Turbidity shall not exceed 5 NTU over background turbidity when the background turbidity is 50 NTU or less, or have more than a 10 percent increase in turbidity when the background turbidity is more than 50 NTU.

(vii) Toxic, radioactive, or deleterious material concentrations shall be below those which may adversely affect characteristic water uses, cause acute or chronic conditions to the aquatic biota, or adversely affect public health (see WAC 173-201-047).

(viii) Aesthetic values shall not be impaired by the presence of materials or their effects, excluding those of natural origin, which offend the senses of sight, smell, touch, or taste.

(2) Class A (excellent).

(a) General characteristic. Water quality of this class shall meet or exceed the requirements for all or substantially all uses.

(b) Characteristic uses. Characteristic uses shall include, but not be limited to, the following:

(i) Water supply (domestic, industrial, agricultural).

(ii) Stock watering.

(iii) Fish and shellfish: Salmonid migration, rearing, spawning, and harvesting.

Other fish migration, rearing, spawning, and harvesting.

Clam, oyster, and mussel rearing, spawning, and harvesting.

Crustaceans and other shellfish (crabs, shrimp, crayfish, scallops, etc.) rearing, spawning, and harvesting.

(iv) Wildlife habitat.

(v) Recreation (primary contact recreation, sport fishing, boating, and aesthetic enjoyment).

(vi) Commerce and navigation.

(c) Water quality criteria.

(i) Fecal coliform organisms.

(A) Freshwater – fecal coliform organisms shall not exceed a geometric mean value of 100 organisms/100 mL, with not more than 10 percent of samples exceeding 200 organisms/100 mL.

(B) Marine water – fecal coliform organisms shall not exceed a geometric mean value of 14 organisms/100 mL, with not more than 10 percent of samples exceeding 43 organisms/100 mL.

(ii) Dissolved oxygen.

(A) Freshwater – dissolved oxygen shall exceed 8.0 mg/L.

(B) Marine water – dissolved oxygen shall exceed 6.0 mg/L. When natural conditions, such as upwelling, occur, causing the dissolved oxygen to be depressed near or below 6.0 mg/L, natural dissolved oxygen levels can be degraded by up to 0.2 mg/L by man-caused activities.

(iii) Total dissolved gas shall not exceed 110 percent of saturation at any point of sample collection.

(iv) Temperature shall not exceed 18.0°C (freshwater) or 16.0°C (marine water) due to human activities. Temperature increases shall not, at any time, exceed $t = \frac{28}{(T+7)}$ (freshwater) or $t = \frac{12}{(T-2)}$ (marine water).

When natural conditions exceed 18.0°C (freshwater) and 16.0°C (marine water), no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C.

For purposes hereof, "$t$" represents the maximum permissible temperature increase measured at a dilution zone boundary; and "$T$" represents the background temperature as measured at a point or points unaffected by the discharge and representative of the highest ambient water temperature in the vicinity of the discharge.

Provided that temperature increase resulting from nonpoint source activities shall not exceed 2.8°C, and the maximum water temperature shall not exceed 18.3°C (freshwater).

(v) pH shall be within the range of 6.5 to 8.5 (freshwater) or 7.0 to 8.5 (marine water) with a man-caused variation within a range of less than 0.5 units.

(vi) Turbidity shall not exceed 5 NTU over background turbidity when the background turbidity is 50 NTU or less, or have more than a 10 percent increase in turbidity when the background turbidity is more than 50 NTU.
turbidity when the background turbidity is more than 50
NTU.
(vii) Toxic, radioactive, or deleterious material con­
centrations shall be below those which may adversely
affect characteristic water uses, cause acute or chronic
conditions to the aquatic biota, or adversely affect public
health (see WAC 173-201-047).
(viii) Aesthetic values shall not be impaired by the
presence of materials or their effects, excluding those of
natural origin, which offend the senses of sight, smell,
touch, or taste.

(3) Class B (good).
(a) General characteristic. Water quality of this class
shall meet or exceed the requirements for most uses.
(b) Characteristic uses. Characteristic uses shall in­
clude, but not be limited to, the following:
(i) Water supply (industrial and agricultural).
(ii) Stock watering.
(iii) Fish and shellfish:
Salmonid migration, rearing, and harvesting.
Other fish migration, rearing, spawning, and
harvesting.
Clam, oyster, and mussel rearing and spawning.
Crustaceans and other shellfish (crabs, shrimp, cray­
fish, scallops, etc.) rearing, spawning, and harvesting.
(iv) Wildlife habitat.
(v) Recreation (secondary contact recreation, sport
fishing, boating, and aesthetic enjoyment).
(vi) Commerce and navigation.
(c) Water quality criteria.
(i) Fecal coliform organisms.
(A) Freshwater - fecal coliform organisms shall not
exceed a geometric mean value of 200 organisms/100
mL, with not more than 10 percent of samples exceeding
400 organisms/100 mL.
(B) Marine water - fecal coliform organisms shall not
exceed a geometric mean value of 100 organisms/100
mL, with not more than 10 percent of samples exceeding
200 organisms/100 mL.
(ii) Dissolved oxygen.
(A) Freshwater - dissolved oxygen shall exceed 6.5
mg/L.
(B) Marine water - dissolved oxygen shall exceed 5.0
mg/L. When natural conditions, such as upwelling, oc­
cur, causing the dissolved oxygen to be depressed near or
below 5.0 mg/L, natural dissolved oxygen levels can be
degraded by up to 0.2 mg/L by man-caused activities.
(iii) Total dissolved gas shall not exceed 110 percent
of saturation at any point of sample collection.
(iv) Temperature shall not exceed 21.0°C (freshwa­
ter) or 19.0°C (marine water) due to human activities.
Temperature increases shall not, at any time, exceed
\( t = \frac{34}{(T+9)} \) (freshwater) or \( t = \frac{16}{T} \) (marine water).
When natural conditions exceed 21.0°C (freshwater)
and 19.0°C (marine water), no temperature increase will
be allowed which will raise the receiving water tempera­
ture by greater than 0.3°C.
For purposes hereof, "\( t \)" represents the maximum
permissible temperature increase measured at a dilution
zone boundary; and "\( T \)" represents the background tem­
perature as measured at a point or points unaffected by
the discharge and representative of the highest ambient
water temperature in the vicinity of the discharge.
Provided that temperature increase resulting from
nonpoint source activities shall not exceed 2.8°C, and
the maximum water temperature shall not exceed
21.3°C (freshwater).
(v) pH shall be within the range of 6.5 to 8.5 (freshwa­
ter) and 7.0 to 8.5 (marine water) with a man-caused
variation within a range of less than 0.5 units.
(vi) Turbidity shall not exceed 10 NTU over back­
ground turbidity when the background turbidity is 50
NTU or less, or have more than a 20 percent increase in
turbidity when the background turbidity is more than 50
NTU.
(vii) Toxic, radioactive, or deleterious material con­
centrations shall be below those which may adversely
affect characteristic water uses, cause acute or chronic
conditions to the aquatic biota, or adversely affect public
health (see WAC 173-201-047).
(viii) Aesthetic values shall not be reduced by dis­
solved, suspended, floating, or submerged matter not at­
thributed to natural causes, so as to affect water use or
taint the flesh of edible species.
(4) Class C (fair).
(a) General characteristic. Water quality of this class
shall meet or exceed the requirements of selected and
essential uses.
(b) Characteristic uses. Characteristic uses shall in­
clude, but not be limited to, the following:
(i) Water supply (industrial).
(ii) Fish (salmonid and other fish migration).
(iii) Recreation (secondary contact recreation, sport
fishing, boating, and aesthetic enjoyment).
(iv) Commerce and navigation.
(c) Water quality criteria - marine water.
(i) Fecal coliform organisms shall not exceed a geo­
metric mean value of 200 organisms/100 mL, with not
more than 10 percent of samples exceeding 400
organisms/100 mL.
(ii) Dissolved oxygen shall exceed 4.0 mg/L. When
natural conditions, such as upwelling, occur, causing the
dissolved oxygen to be depressed near or below 4.0
mg/L, natural dissolved oxygen levels can be degraded
by up to 0.2 mg/L by man-caused activities.
(iii) Temperature shall not exceed 22.0°C due to hu­
man activities. Temperature increases shall not, at any
time, exceed
\( t = \frac{20}{(T+2)} \).
When natural conditions exceed 22.0°C, no tempera­
ture increase will be allowed which will raise the receiv­
ing water temperature by greater than 0.3°C.
For purposes hereof, "\( t \)" represents the maximum
permissible temperature increase measured at a dilution
zone boundary; and "\( T \)" represents the background tem­
perature as measured at a point unaffected by the dis­
charge and representative of the highest ambient water
temperature in the vicinity of the discharge.
(iv) pH shall be within the range of 6.5 to 9.0 with a
man-caused variation within a range of less than 0.5
units.
(v) Turbidity shall not exceed 10 NTU over back­
ground turbidity when the background turbidity is 50
NTU.
Water Quality Standards—Surface Waters

173–201–047

Toxic substances. (1) The following criteria shall apply to all surface waters of the state of Washington (values are µg/L):

<table>
<thead>
<tr>
<th>Substance</th>
<th>Freshwater Acute</th>
<th>Freshwater Chronic</th>
<th>Marine Water Acute</th>
<th>Marine Water Chronic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aldrin/Dieldrin, a</td>
<td>2.5&lt;</td>
<td>0.0019&lt;</td>
<td>0.71&lt;</td>
<td>0.0019&lt;</td>
</tr>
<tr>
<td>Ammonia</td>
<td>b,y</td>
<td>c,z</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cadmium</td>
<td>d,y</td>
<td>e,z</td>
<td>43.0&lt;</td>
<td>9.3&lt;</td>
</tr>
<tr>
<td>Chlordane</td>
<td>2.4&lt;</td>
<td>0.0043&lt;</td>
<td>0.09&lt;</td>
<td>0.004&lt;</td>
</tr>
<tr>
<td>Chlorine</td>
<td>19.0&lt;</td>
<td>11.0&lt;</td>
<td>13.0&lt;</td>
<td>7.5&lt;</td>
</tr>
<tr>
<td>Chlorpyrifos</td>
<td>0.083&lt;</td>
<td>0.041&lt;</td>
<td>0.017&lt;</td>
<td>0.0056&lt;</td>
</tr>
<tr>
<td>Chromium (Hex)</td>
<td>16.0&lt;</td>
<td>11.0&lt;</td>
<td>1100.0&lt;</td>
<td>50.0&lt;</td>
</tr>
<tr>
<td>Chromium (Tri)</td>
<td>f,y</td>
<td>g,z</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copper</td>
<td>h,y</td>
<td>l,z</td>
<td>2.9&lt;</td>
<td></td>
</tr>
<tr>
<td>Cyanide</td>
<td>22.0&lt;</td>
<td>5.2&lt;</td>
<td>1.0&lt;</td>
<td></td>
</tr>
<tr>
<td>DDT &amp; Metabolites</td>
<td>1.1&lt;</td>
<td>0.001&lt;</td>
<td>0.13&lt;</td>
<td>0.001&lt;</td>
</tr>
<tr>
<td>Endosulfan</td>
<td>0.22&lt;</td>
<td>0.056&lt;</td>
<td>0.034&lt;</td>
<td>0.008&lt;</td>
</tr>
<tr>
<td>Endrin</td>
<td>0.18&lt;</td>
<td>0.0023&lt;</td>
<td></td>
<td>0.0023&lt;</td>
</tr>
<tr>
<td>Hexachloropropylene</td>
<td>0.52&lt;</td>
<td>0.038&lt;</td>
<td>0.053&lt;</td>
<td>0.0036&lt;</td>
</tr>
<tr>
<td>Hexachlorocyclohexane (Lindane)</td>
<td>2.0&lt;</td>
<td>0.08&lt;</td>
<td>0.16&lt;</td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td>j,y</td>
<td>k,z</td>
<td>140.0&lt;</td>
<td>5.6&lt;</td>
</tr>
<tr>
<td>Mercury</td>
<td>2.4&lt;</td>
<td>0.012&lt;</td>
<td>2.1&lt;</td>
<td>0.025&lt;</td>
</tr>
<tr>
<td>Nickel</td>
<td>l,y</td>
<td>m,z</td>
<td>75.0&lt;</td>
<td>8.3&lt;</td>
</tr>
<tr>
<td>Parathion</td>
<td>0.063&lt;</td>
<td>0.013&lt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCB's</td>
<td>2.0&lt;</td>
<td>0.014&lt;</td>
<td>10.0&lt;</td>
<td>0.03&lt;</td>
</tr>
<tr>
<td>Pentachloroophenol</td>
<td>q,y</td>
<td>r,z</td>
<td>13.0&lt;</td>
<td>7.9&lt;</td>
</tr>
<tr>
<td>Selenium</td>
<td>260.0&lt;</td>
<td>35.0&lt;</td>
<td>410.0&lt;</td>
<td>54.0&lt;</td>
</tr>
<tr>
<td>Silver</td>
<td>n,w</td>
<td>2.3&lt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toxaphene</td>
<td>0.73Y</td>
<td>0.0002&lt;</td>
<td>0.21&lt;</td>
<td>0.0002&lt;</td>
</tr>
<tr>
<td>Zinc</td>
<td>o,y</td>
<td>p,z</td>
<td>95.0&lt;</td>
<td>86.0&lt;</td>
</tr>
</tbody>
</table>

Notes to Table

a. Aldrin is metabolically converted to Dieldrin. Therefore, the sum of the Aldrin and Dieldrin concentrations are compared with the Dieldrin criteria.

b. \( \leq 0.52/\text{FT}/\text{FPH}/2 \)

Where \( \text{FT} = 10^{0.03(20-\text{TCAP})} \), \( \text{TCAP} \leq T \leq 30 \)

\( 10^{0.03(20-T)} \), \( 0 \leq T \leq \text{TCAP} \)

\( \text{FPH} = 1; \ 8 \leq \text{pH} \leq 9 \)

\( 1 + 10^{7.4-\text{pH}} \)

\( \text{FPH} = \frac{10\text{ TCAP}}{1.25}; 6.5 \leq \text{pH} \leq 8 \)

TCAP = 20°C; Salmonids present

TCAP = 25°C; Salmonids absent

c. \( \leq 0.80/\text{FT}/\text{FPH}/\text{RATIO} \)

The RATIO = 16 if; 7.7 \leq \text{pH} \leq 9

The RATIO = 24 \times 10^{7.7-\text{pH}} if; 6.5 \leq \text{pH} \leq 7.7

\( 1 + 10^{7.4-\text{pH}} \)

Where FT and FPH are as above except:

TCAP = 15°C; Salmonids present

TCAP = 20°C; Salmonids absent

d. \( \leq e \)

(1.128 \times \text{ln (hardness)}) - 3.828

e. \( \leq e \)

(0.7852 \times \text{ln (hardness)}) - 3.490

f. \( \leq e \)

(0.8190 \times \text{ln (hardness)}) + 3.688

g. \( \leq e \)

(0.8190 \times \text{ln (hardness)}) + 1.561

h. \( \leq e \)

(0.9422 \times \text{ln (hardness)}) - 1.464

[Statutory Authority: RCW 90.48.035 and 90.48.260. 88-02-058 (Order DE 78-12), § 173-201-045, filed 6/2/82, 78-02-043 (Order DE 78-12), § 173-201-045, filed 1/17/78.]

[1988 WAC Supp—page 415]
173-201-047

Title 173 WAC: Ecology, Department of

1.465) no waste dis-"f
6.52) 5.290j
4.830jr. An instantaneous concentration not to be exceeded
4,705) 1.460)

1.不属于自然背景水平的水体，应根据《USEPA质量标准》，1986年所列的值来使用和解释。任何有毒或有害物质的浓度应根据水体的自然背景水平来确定，以避免对水生生物造成急性或慢性影响。
2. 水温不应超过20.0°C，除非温度升高不超过0.3°C。
3. 水温的任何单次升高均应在309.3°C以上。
4. 水温应在0.3°C以上。
5. 水温在任何单次升高均应在309.3°C以上。

(2) USEPA Quality Criteria for Water, 1986 shall be used in the use and interpretation of the values listed in subsection (1) of this section.
(3) Concentrations of toxic, and other substances with toxic propensities not listed in subsection (1) of this section shall be determined in consideration of USEPA’s Quality Criteria for Water, 1986, and as revised, and other relevant information as appropriate.
(4) Toxic substances shall not be introduced above natural background levels in waters of the state which may adversely affect characteristic water uses, cause acute or chronic conditions to the aquatic biota, or adversely affect public health, as determined by the department.

[Statutory Authority: RCW 90.48.035 and 90.48.260. 88-02-059 (Order 87-6), § 173-201-047, filed 1/6/88.]

Reviser’s note: The brackets and enclosed material in the text of the above section in the copy filed by the agency.

WAC 173-201-070 General classifications. General classifications applying to various surface water bodies not specifically classified under WAC 173-201-080 or 173-201-085 are as follows:

1. All surface waters lying within national parks, national forests, and/or wilderness areas are classified Class AA or lake class.
2. All lakes and their feeder streams within the state are classified lake class and Class AA respectively, except for those feeder streams specifically classified otherwise.
3. All reservoirs with a mean detention time of greater than 15 days are classified lake class.
4. All reservoirs with a mean detention time of 15 days or less are classified the same as the river section in which they are located.
5. All reservoirs established on preexisting lakes are classified as lake class.

(6) All unclassified surface waters that are tributaries to Class AA waters are classified Class AA. All other unclassified surface waters within the state are hereby classified Class A.

[Statutory Authority: RCW 90.48.035 and 90.48.260. 88-02-059 (Order 87-6), § 173-201-070, filed 1/6/88. Statutory Authority: RCW 90.48.035. 82-12-078 (Order DE 77-12), § 173-201-070, filed 6/2/82; 78-02-043 (Order DE 77-32), § 173-201-070, filed 1/17/78; Order 73-4, § 173-201-070, filed 7/6/73.]

WAC 173-201-080 Specific classifications—Freshwater. Specific fresh surface waters of the state of Washington are classified as follows:

1. American River. Class AA
2. Big Quilcene River and tributaries. Class AA
3. Bumping River. Class A
4. Burnt Bridge Creek. Class A
5. Cedar River from Lake Washington to Landsburg Dam (river mile 21.6). Class A
6. Cedar River and tributaries from Landsburg Dam (river mile 21.6) to headwaters. Special condition — no waste discharge will be permitted. Class AA
7. Chehalis River from upper boundary of Grays Harbor at Cosmopolis (river mile 3.1, longitude 123°45'45" W) to Scammon Creek (river mile 65.8). Class A
8. Chehalis River from Scammon Creek (river mile 65.8) to Newaukum River (river mile 75.2). Special condition — dissolved oxygen shall exceed 5.0 mg/L from June 1, to September 15. For the remainder of the year, the dissolved oxygen shall meet Class A criteria. Class A
9. Chehalis River from Newaukum River (river mile 75.2) to Rock Creek (river mile 106.7). Class A
10. Chehalis River, from Rock Creek (river mile 106.7) to headwaters. Class AA
11. Chehalis River, south fork. Class A
12. Chewack River. Class AA
13. Chiwawa River. Class AA
14. Cispus River. Class AA
15. Clearwater River. Class A
16. Cle Elum River. Class AA
17. Cloquallum Creek. Class A
18. Clover Creek from outlet of Lake Spanaway to inlet of Lake Steilacoom. Class A
19. Columbia River from mouth to the Washington—Oregon border (river mile 309.3). Special conditions — temperature shall not exceed 20.0°C due to human activities. When natural conditions exceed 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed 0.3°C due to any single source or 1.1°C due to all such activities combined. Dissolved oxygen shall exceed 90 percent of saturation. Class A
creases, at any time, exceed \( t = \frac{34}{T+9} \).

(20) Columbia River from Washington–Oregon border (river mile 309.3) to Grand Coulee Dam (river mile 596.6). Special condition from Washington–Oregon border (river mile 309.3) to Priest Rapids Dam (river mile 397.1). Temperature shall not exceed 20.0°C due to human activities. When natural conditions exceed 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed \( t = \frac{34}{T+9} \).

(21) Columbia River from Grand Coulee Dam (river mile 596.6) to Canadian border (river mile 745.0).

(22) Colville River.

(23) Coweeman River from mouth to Mulholland Creek (river mile 18.4).

(24) Coweeman River from Mulholland Creek (river mile 18.4) to headwaters.

(25) Cowlitz River from mouth to base of Riffe Lake Dam (river mile 52.0).

(26) Cowlitz River from base of Riffe Lake Dam (river mile 52.0) to headwaters.

(27) Crab Creek and tributaries.

(28) Decker Creek.

(29) Deschutes River from mouth to boundary of Snoqualmie National Forest (river mile 48.2).

(30) Deschutes River from boundary of Snoqualmie National Forest (river mile 48.2) to headwaters.

(31) Dickey River.

(32) Dosewallips River and tributaries.

(33) Duckabush River and tributaries.

(34) Dungeness River from mouth to Canyon Creek (river mile 10.8).

(35) Dungeness River and tributaries from Canyon Creek (river mile 10.8) to headwaters.

(36) Duwamish River from mouth south of a line bearing 254°true from the NW corner of berth 3, terminal No. 37 to the Black River (river mile 11.0) (Duwamish River continues as the Green River above the Black River).

(37) Elochoman River.

(38) Elwha River and tributaries.

(39) Entiat River from Wenatchee National Forest boundary (river mile 20.5) to headwaters.

(40) Grande Ronde River from mouth to Oregon border (river mile 37). Special condition – temperature shall not exceed 20.0°C due to human activities. When natural conditions exceed 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed \( t = \frac{34}{T+9} \).

(41) Grays River from Grays River Falls (river mile 15.8) to headwaters.

(42) Green River (Cowlitz County).

(43) Green River (King County) from Black River (river mile 11.0 and point where Duwamish River continues as the Green River) to west boundary of Sec. 27–T21N–R6E (west boundary of Flaming Geyser State Park at river mile 42.3).

(44) Green River (King County) from west boundary of Sec. 27–T21N–R6E (west boundary of Flaming Geyser State Park, river mile 42.3) to west boundary of Sec. 13–T21N–R7E (river mile 59.1).

(45) Green River and tributaries (King County) from west boundary of Sec. 13–T21N–R7E (river mile 59.1) to headwaters. Special condition – no waste discharge will be permitted.

(46) Hamma Hamma River and tributaries.

(47) Hanaford Creek from mouth to east boundary of Sec. 25–T15N–R2W (river mile 4.1). Special condition – dissolved oxygen shall exceed 6.5 mg/L.

(48) Hanaford Creek from east boundary of Sec. 25–T15N–R2W (river mile 4.1) to headwaters.

(49) Hoh River and tributaries.

(50) Hoquiam River (continues as west fork above east fork) from mouth to river mile 9.3 (Dekay Road bridge) (upper limit of tidal influence).

(51) Humptulips River and tributaries from mouth to Olympic National Forest boundary on east fork (river mile 12.8) and west fork (river mile 40.4) (main stem continues as west fork).

(52) Humptulips River, east fork from Olympic National Forest boundary (river mile 12.8) to headwaters.

(53) Humptulips River, west fork from Olympic National Forest boundary (river mile 40.4) to headwaters.

(54) Issaquah Creek.

(55) Kalama River from lower Kalama River Falls (river mile 10.4) to headwaters.

(56) Klickitat River from Little Klickitat River (river mile 19.8) to headwaters.

(57) Lake Washington Ship Canal from Government Locks (river mile 1.0) to Lake Washington (river mile 8.6). Special condition – salinity shall not exceed one part per thousand (1.0 ppt) at any point or depth along a line that transects the ship canal at the University Bridge (river mile 6.1).

(58) Lewis River, east fork, from Multon Falls (river mile 24.6) to headwaters.

(59) Little Wenatchee River.

(60) Methow River from mouth to Chewack River (river mile 50.1).
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(61) Methow River from Chewack River (river mile 50.1) to headwaters.

(62) Mill Creek from mouth to 13th street bridge in Walla Walla (river mile 6.4). Special condition – dissolved oxygen concentration shall exceed 5.0 mg/L.

(63) Mill Creek from 13th Street bridge in Walla Walla (river mile 6.4) to Walla Walla Waterworks Dam (river mile 25.2).

(64) Mill Creek and tributaries from city of Walla Walla Waterworks Dam (river mile 25.2) to headwaters. Special condition – no waste discharge will be permitted.

(65) Naches River from Snoqualmie National Forest boundary (river mile 35.7) to headwaters.

(66) Naselle River from Naselle "Falls" (cascade at river mile 18.6) to headwaters.

(67) Newaukum River.

(68) Nisqually River from mouth to Alder Dam (river mile 44.2).

(69) Nisqually River from Alder Dam (river mile 44.2) to headwaters.

(70) Nooksack River from mouth to Maple Creek (river mile 49.7).

(71) Nooksack River from Maple Creek (river mile 49.7) to headwaters.

(72) Nooksack River, south fork, from mouth to Skookum Creek (river mile 14.3).

(73) Nooksack River, South fork, from Skookum Creek (river mile 14.3) to headwaters.

(74) Nooksack River, middle fork.

(75) Okanogan River.

(76) Palouse River from mouth to south fork (Colfax, river mile 89.6).

(77) Palouse River from south fork (Colfax, river mile 89.6) to Idaho border (river mile 123.4). Special condition – temperature shall not exceed 20.0°C due to human activities. When natural conditions exceed 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed \( t = \frac{34}{(T+9)} \).

(78) Pend Oreille River from Canadian border (river mile 16.0) to Idaho border (river mile 87.7). Special condition – temperature shall not exceed 20.0°C due to human activities. When natural conditions exceed 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed \( t = \frac{34}{(T+9)} \).

(79) Pilchuck River from city of Snohomish Waterworks Dam (river mile 26.8) to headwaters.

(80) Puyallup River from mouth to river mile 1.0.

Class AA

(81) Puyallup River from river mile 1.0 to Kings Creek (river mile 31.6).

Class A

(82) Puyallup River from Kings Creek (river mile 31.6) to headwaters.

Class AA

(83) Queets River and tributaries.

Class AA

(84) Quillayute River.

Class AA

(85) Quinault River and tributaries.

Class AA

(86) Salmon Creek (Clark County).

Class A

(87) Satsop River from mouth to west fork (river mile 6.4).

Class A

(88) Satsop River, east fork.

Class AA

(89) Satsop River, middle fork.

Class AA

(90) Satsop River, west fork.

Class AA

(91) Skagit River from mouth to Skiyou Slough–lower end (river mile 25.6).

Class A

(92) Skagit River and tributaries (includes Baker, Suak, Suiattle, and Cascade rivers) from Skiyou Slough–lower end, (river mile 25.6) to Canadian border (river mile 127.0).

Class AA

(93) Skokomish River and tributaries.

Class AA

(94) Skookumchuck River from Bloody Run Creek (river mile 21.4) to headwaters.

Class AA

(95) Skykomish River from mouth to May Creek (above Gold Bar at river mile 41.2).

Class A

(96) Skykomish River from May Creek (above Gold Bar at river mile 41.2) to headwaters.

Class AA

(97) Snake River from mouth to Washington–Idaho–Oregon border (river mile 176.1). Special condition.

(a) Below Clearwater River (river mile 139.3). Temperature shall not exceed 20.0°C due to human activities. When natural conditions exceed 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed \( t = \frac{34}{(T+9)} \).

(b) Above Clearwater River (river mile 139.3). Temperature shall not exceed 20.0°C due to human activities. When natural conditions exceed 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed 0.3°C due to any single source or 1.1°C due to all such activities combined.

Class A

(98) Snohomish River from mouth and east of longitude 122°13'40"W upstream to latitude 47°56'30"N (southern tip of Ebey Island river mile 8.1). Special condition – fecal coliform organisms shall not exceed a geometric mean value of 200, organisms/100 mL with not more than 10 percent of samples exceeding 400 organisms/100 mL.

Class A
(99) Snohomish River upstream from latitude 47°56'30"N (southern tip of Ebey Island river mile 8.1) to confluence with Skykomish and Snoqualmie River (river mile 20.5).

(100) Snoqualmie River and tributaries from mouth to west boundary of Twin Falls State Park on south fork (river mile 9.1). Special condition - temperature shall not exceed 20.0°C due to human activities. When natural conditions exceed 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed \( t = \frac{34}{(T+9)} \).

(101) Snoqualmie River, middle fork.

(102) Snoqualmie River, north fork.

(103) Snoqualmie River, south fork, from west boundary of Twin Falls State Park (river mile 9.1) to headwaters.

(104) Soleduck River and tributaries.

(105) Spokane River from mouth to Long Lake Dam (river mile 33.9). Special condition - temperature shall not exceed 20.0°C due to human activities. When natural conditions exceed 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed \( t = \frac{34}{(T+9)} \).

(106) Spokane River from Long Lake Dam (river mile 33.9) to Nine Mile Bridge (river mile 58.0). Special condition:
(a) The average euphotic zone concentration of total phosphorus (as P) shall not exceed 25µg/L during the period of June 1 to October 31.
(b) Temperature shall not exceed 20.0°C, due to human activities. When natural conditions exceed 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed \( t = \frac{34}{(T+9)} \).

(107) Spokane River from Nine Mile Bridge (river mile 58.0) to the Idaho border (river mile 96.5). Temperature shall not exceed 20.0°C due to human activities. When natural conditions exceed 20.0°C no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed \( t = \frac{34}{(T+9)} \).

(108) Stehekin River.

(109) Stillaguamish River from mouth to north and south forks (river mile 17.8).

(110) Stillaguamish River, north fork, from mouth to Squire Creek (river mile 31.2).

(111) Stillaguamish River, north fork, from Squire Creek (river mile 31.2) to headwaters.

(112) Stillaguamish River, south fork, from mouth to Canyon Creek (river mile 33.7).

(113) Stillaguamish River, south fork, from Canyon Creek (river mile 33.7) to the headwaters.

(114) Sulphur Creek.

(115) Sultan River from mouth to Chaplain Creek (river mile 5.9).

(116) Sultan River and tributaries from Chaplain Creek (river mile 5.9) to headwaters. Special condition - no waste discharge will be permitted above city of Everett Division Dam (river mile 9.4).

(117) Sumas River from Canadian border (river mile 12) to headwaters (river mile 23).

(118) Tieton River.

(119) Tolt River, south fork and tributaries from mouth to west boundary of Sec. 31-T26N-R9E (river mile 6.9).

(120) Tolt River, south fork from west boundary of Sec. 31-T26N-R9E (river mile 6.9) to headwaters. Special condition - no waste discharge will be permitted.

(121) Touchet River, north fork from Dayton water intake structure (river mile 3.0) to headwaters.

(122) Toutle River, north fork, from Green River to headwaters.

(123) Toutle River, south fork.

(124) Tucannon River from Umatilla National Forest boundary (river mile 38.1) to headwaters.

(125) Twisp River.

(126) Union River and tributaries from Bremerton Waterworks Dam (river mile 6.9) to headwaters. Special condition - no waste discharge will be permitted.

(127) Walla Walla River from mouth to Lowden (Dry Creek at river mile 27.2).

(128) Walla Walla River from Lowden (Dry Creek at river mile 27.2) to Oregon border (river mile 40). Special condition - temperature shall not exceed 20.0°C due to human activities. When natural conditions exceed 20.0°C, no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3°C; nor shall such temperature increases, at any time, exceed \( t = \frac{34}{(T+9)} \).

(129) Wenatchee River from Wenatchee National Forest boundary (river mile 27.1) to headwaters.

(130) White River (Pierce–King counties) from Mud Mountain Dam (river mile 29.6) to headwaters.

(131) White River (Chelan County).

(132) Wildcat Creek.

(133) Willapa River upstream of a line bearing 70°true through Mailboat Slough light (river mile 1.8).
WAC 173-201-100 Implementation. (1) Discharges from municipal, commercial, and industrial operations. The primary means to be used for controlling municipal, commercial, and industrial waste discharges shall be through the issuance of waste disposal permits, as provided for in RCW 90.48.160 and following.

(2) Miscellaneous waste discharge or water quality effect sources. The director shall, through the issuance of regulatory permits, directives, and orders, as are appropriate, control miscellaneous waste discharges and water quality effect sources not covered by WAC 173-201-100(1) hereof. It is noted that, from time to time, certain short-term activities which are deemed necessary to accommodate essential activities or to otherwise protect the public interest may be specially authorized by the director as indicated in WAC 173-201-035 (8)(e), under such conditions as the director may prescribe, even though such activities may result in a reduction of water quality conditions below those criteria and classifications established by this regulation.

Chapter 173-202 WAC
WASHINGTON FOREST PRACTICES RULES AND REGULATIONS TO PROTECT WATER QUALITY


WAC 173-202-020 Certain WAC sections adopted by reference. The following sections of the Washington Administrative Code as now promulgated are hereby adopted by reference as part of this chapter in all respects as though the sections were set forth herein in full:

WAC 222-08-035-Continuing review of forest practices regulations.
WAC 222-12-010-Authority.
WAC 222-12-040-Alternate plans.
WAC 222-12-045-Adaptive management.
WAC 222-12-070-Enforcement policy.
WAC 222-12-090-Forest practices board manual.
WAC 222-16-010-General definitions.
WAC 222-16-020-Water categories.
WAC 222-16-030-Water typing system.
WAC 222-16-050-Classes of forest practices.
WAC 222-24-010-Policy.
WAC 222-24-020 (2), (3), (4)-Road location.
WAC 222-24-025 (5), (6), (7), (8), (9)-Road design.
WAC 222-24-030 (2), (4), (5), (6), (8), (9), (10)-Road construction.
WAC 222-24-035(1)-Landing location and construction.
WAC 222-24-040 (1), (2), (3), (4)-Water crossing structures.
WAC 222-24-050-Road maintenance.
WAC 222-24-060 (1), (2), (3), (6)-Rock quarries, gravel pits, borrow pits, and spoil disposal areas.
WAC 222-30-010-Policy—Timber harvesting.
WAC 222-30-020 (2), (3), (c), (3)(e), (4), (5), (6), (7)—Harvest unit planning and design.
WAC 222-30-030—Stream bank integrity.
WAC 222-30-040—Temperature control.
WAC 222-30-050 (1), (2), (3), (4)—Felling and bucking.
WAC 222-30-060 (1), (2), (3), (4)(c)—Cable yarding.
Chapter 173-216 WAC
STATE WASTE DISCHARGE PERMIT PROGRAM


WAC 173-216-130 Modification, suspension, and revocation of permits. (1) Any permit issued under this chapter can be modified, suspended, or revoked, in whole or in part by the department for the following causes:
   (a) Violation of any permit term or condition;
   (b) Obtaining a permit by misrepresentation or failure to fully disclose all relevant facts;
   (c) A material change in quantity or type of waste disposal;
   (d) A material change in the condition of the waters of the state; or
   (e) Nonpayment of permit fees assessed pursuant to RCW 90.48.610.

   (2) The department may modify a permit, including the schedule of compliance or other conditions, if it determines good and valid cause exists, which includes promulgation or revisions of categorical standards.

Chapter 173-220 WAC
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT PROGRAM

WAC 173-220-010 Purpose.
173-220-020 Permit required.
173-220-030 Definitions.
173-220-040 Application for permit.
173-220-045 General permits.
173-220-050 Public notice.
173-220-060 Fact sheets.
173-220-070 Notice to other government agencies.
173-220-080 Public access to information.
173-220-090 Public hearings.
173-220-100 Public notice of public hearings.
173-220-120 Prohibited discharges.
173-220-130 Effluent limitations, water quality standards and other requirements for permits.
173-220-140 Schedules of compliance.
173-220-150 Other terms and conditions.
173-220-160 Transmission of issued permit to regional administrator.

173-220-180 Duration and replacement of existing permit.
173-220-190 Modification and revocation of permits.
173-220-200 Transfer of permit.
173-220-210 Monitoring, recording and reporting.
173-220-220 Repealed.
173-220-225 Appeals.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER


WAC 173-220-010 Purpose. The purpose of this chapter is to establish a state permit program, applicable to the discharge of pollutants and other wastes and materials to the surface waters of the state, operating under state law as a part of the National Pollutant Discharge Elimination System (NPDES) created by section 402 of the Federal Water Pollution Control Act (FWPCA). Permits issued under this chapter are designed to satisfy the requirements for discharge permits under both section 402(b) of the FWPCA and chapter 90.48 RCW.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-010, filed 11/1/88; Order DE 74-1, § 173-220-010, filed 2/15/74.]

WAC 173-220-020 Permit required. No pollutants shall be discharged to any surface water of the state from a point source, except as authorized by an individual or general permit issued pursuant to this chapter.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-010, filed 11/1/88; Order DE 74-1, § 173-220-010, filed 2/15/74.]

WAC 173-220-030 Definitions. For purposes of this chapter, the following definitions shall be applicable:
   (1) "Administrator" means the administrator of the United States Environmental Protection Agency.
   (2) "Combined waste treatment facility" means any publicly owned waste treatment facility in which the maximum monthly average influent from any one industrial category, or categories producing similar wastes, constitutes over eighty-five percent of the design load for biochemical oxygen demand or suspended solids. Each single industrial category must contribute a minimum of ten percent of the applicable load.
   (3) "Department" means department of ecology.
   (4) "Director" means the director of the department of ecology or his/her authorized representative.
   (5) "Discharge of pollutant" and the term "discharge of pollutants" each means (a) any addition of any pollutant to surface waters of the state from any point source, (b) any addition of any pollutant to combination of pollutants to the waters of the contiguous zone or the ocean from any point source.
other than a vessel or other floating craft which is being used as a means of transportation.

(6) "Discharger" means owner or operator of any facility or activity subject to regulation under the NPDES program.

(7) "Domestic wastewater" means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments or other places, together with such groundwater infiltration or surface waters as may be present.

(8) "Domestic wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim or dispose of domestic wastewater together with such industrial waste as may be present. This term applies only to facilities discharging to surface water.

(9) "Effluent limitation" means any restriction established by the state or administrator on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into surface waters of the state.

(10) "FWPCA" means the Federal Water Pollution Control Act as amended, 33 U.S.C. 1251 et seq.

(11) "General permit" means an NPDES permit which covers multiple dischargers of a point source category within a designated geographical area, in lieu of individual permits being issued to each discharger.

(12) "Individual permit" means a permit for a single point source or a single facility.

(13) "Major discharger" means any discharger classified as such by the administrator in conjunction with the director and published in the annual state-EPA agreement.

(14) "Minor discharger" means any discharger not designated as major or covered under a general permit.

(15) "NPDES" means the National Pollutant Discharge Elimination System.

(16) "Permit" means an authorization, license, or equivalent control document issued by the director to implement this chapter.

(17) "Person" includes any political subdivision, local, state, or federal government agency, municipality, industry, public or private corporation, partnership, association, firm, individual, or any other entity whatsoever.

(18) "Point source" means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

(19) "Pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal and agricultural waste discharged into water. This term does not include sewage from vessels within the meaning of section 312 of the FWPCA nor does it include dredged or fill material discharged in accordance with a permit issued under section 404 of the FWPCA.

(20) "Regional administrator" means the regional administrator of Region X of the Environmental Protection Agency (EPA) or his/her authorized representative.

(21) "Surface waters of the state" means all waters defined as "waters of the United States" in 40 CFR 122.2 that are within the boundaries of the state of Washington. This includes lakes, rivers, ponds, streams, inland waters, wetlands, ocean, bays, estuaries, sounds, and inlets.

(22) "Water quality standards" means the state of Washington's water quality standards for surface waters of the state, which are codified in chapter 173–201 WAC.


WAC 173–220–040 Application for permit. (1) Any person presently discharging pollutants to surface waters of the state must file an application with the department on a form prescribed by the department. For the purpose of satisfying the requirements of this subsection, any completed application filed with the Environmental Protection Agency prior to the approval by the administrator under section 402(b) of the FWPCA of this state permit program shall constitute a filing with the department.

(2) Any person proposing to commence a discharge of pollutants to surface waters of the state must file an application with the department on a form prescribed by the department, (a) no less than one hundred eighty days in advance of the date on which it is desired to commence the discharge of pollutants, or (b) in sufficient time prior to commencement of the discharge of pollutants to insure compliance with the requirements of section 306 of the FWPCA and any other applicable water quality standards or effluent standards and limitations.

(3) The applicant must pay any applicable fees required pursuant to RCW 90.48.610.

(4) The requirement for permit application will be satisfied if the discharger files:

(a) A complete application form which is appropriate for the type, category, or size of discharge per 40 CFR 122.21; or

(b) A complete request for coverage by a general permit; and

(c) Any additional information required by the department pertaining to pollutant discharge.

(5) The application form shall bear a certification of correctness to be signed:

(a) In the case of corporations, by a responsible corporate officer.

(b) In the case of a partnership, by a general partner.

(c) In the case of sole proprietorship, by the proprietor.

(d) In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.
6) Applications for permits for domestic wastewater facilities that are either owned or operated by, or under contract to, a public entity shall be submitted by the public entity.

7) No discharge of pollutants into the surface waters of the state is authorized until such time as a permit has been issued consistent with the terms and conditions of this chapter.


WAC 173-220-045 General permits. (1) The director may issue general permits to cover categories of dischargers as described under subsection (2) of this section. The area shall correspond to existing geographic or political boundaries, such as:

(a) Designated planning areas under section 208 or 303 of the FWPCA;

(b) Sewer districts or other special purpose districts;

(c) City, county or state political boundaries;

(d) State or county highway systems;

(e) Standard metropolitan statistical areas as defined by the Federal Office of Management and Budget;

(f) Urbanized areas as designated by the Bureau of the Census; or

(g) Any other appropriate division or combination of boundaries.

(2) General permits may be written to cover the following within a described area:

(a) Storm water point sources; or

(b) Categories of point sources which meet all of the following requirements:

(i) Involve the same or substantially similar types of operations;

(ii) Discharge the same types of wastes;

(iii) Require the same effluent limitations or operating conditions, and require similar monitoring; and

(iv) In the opinion of the director are more appropriately controlled under a general permit than under individual permits.

(3) General permits may be issued, modified, revoked and reissued, or terminated in accordance with the other provisions of this chapter. Grounds for modification or revocation and reissuance include those listed in subsection (4) of this section.

(4) The director may require any discharger authorized by a general permit to apply for and obtain an individual permit. Cases where an individual permit may be required include, but are not limited to the following:

(a) The discharger is not in compliance with conditions of the general permit;

(b) A change occurs in the technology or practices for control or abatement of pollutants applicable to the point source;

(c) Effluent limitation guidelines are promulgated for point sources covered by the general permit;

(d) A water quality management plan containing requirements applicable to such point sources is approved;

(e) Effluent limitations more stringent than those contained in a general permit are necessary to meet water quality standards;

(f) Information is obtained which indicates that cumulative effects on the environment from dischargers covered under the general permit are unacceptable; or

(g) Other causes listed in WAC 173-220-150 (1)(d).

(5) In cases where the director requires any discharger to apply for an individual permit, the discharger must be notified in writing that an individual permit application is required. This notice shall include a statement of why an individual permit is being required, an application form and a time limit for submitting the application.

(6) Any interested person may petition the director to require a discharger authorized by a general permit to apply for and obtain an individual permit.

(7) Any discharger authorized by a general permit may request to be excluded from coverage by the general permit by applying for an individual permit. The discharger shall submit to the director an application as described in WAC 173-220-040, with reasons supporting the request. The director shall either issue an individual permit or deny the request with a statement explaining the reason for denial.

(8) When an individual permit is issued to a discharger otherwise subject to a general permit, the applicability of the general permit to that permittee is automatically terminated on the effective date of the individual permit.

(9) Following issuance by the department of a general permit all dischargers who desire to be covered by the general permit shall notify the department on a form prescribed by the department. Unless the department responds in writing to the notification, coverage of a discharger by a general permit will automatically commence on the thirty-first day following the end of the thirty-day comment period required by WAC 173-220-050(2).

(10) Any previously issued individual permit shall remain in effect until terminated in writing by the department, except that continuation of an expired individual permit (pursuant to WAC 173-220-180(5)), shall terminate upon coverage by the general permit.

(11) Where the department has determined that a discharger should not be covered by a general permit, it shall respond in writing within thirty days, to a request for coverage stating the reason(s) why coverage cannot become effective and any actions needed to be taken by the discharger in order for coverage by the general permit to become effective.


WAC 173-220-050 Public notice. (1) Public notice of every draft permit determination regarding an individual permit or general permit, and request for coverage by a general permit, shall be circulated in a manner
designated to inform interested and potentially affected persons of the proposed discharge and of the proposed determination to issue or deny a permit for the proposed discharge, as follows:

(a) For individual permits, notice shall be circulated within the geographical area of the proposed discharge; such circulation may include any or all of the following, as directed by the department:
   (i) Posting by the applicant for a period of thirty days in the post office, public library, and public places of the municipality nearest the premises of the applicant in which the effluent source is located;
   (ii) Posting by the applicant for a period of thirty days near the entrance of the applicant's premises and nearby places;
   (iii) Publishing by the applicant, at his own cost within such time as the director shall prescribe, through a notice form provided by the department, in major local newspapers of general circulation serving the area in which the discharge occurs: Provided, That if an applicant fails to publish notice within thirty days of the time prescribed by the director, the department may publish the notice and bill the applicant for the cost of publication;
   (iv) Publishing by the applicant of paid advertisements;
   (v) Publishing by the department of news releases or newsletter articles.

(b) For general permits, such circulation shall include the following:
   (i) Publishing by the department of a notice of intent to issue a general permit in a major local newspaper of general circulation in each affected area; and
   (ii) Posting or publishing by the applicant of a request for coverage by a general permit in accordance with any or all methods listed in (a)(i), (ii), (iii), (iv), or (v) of this subsection, as directed by the department.

(c) Notice shall be mailed to any person upon request; and

(d) The department shall add the name of any person upon request to a mailing list to receive copies of notices within the state or within a certain geographical area.

(2) The department shall provide a period of not less than thirty days following the date of the public notice during which time interested persons may submit their written views on a draft permit determination or a request for coverage by a general permit. All written comments submitted during the thirty-day comment period shall be retained by the department and considered in the formulation of its final determination with respect to the application. The period for comment may be extended at the discretion of the department.

(3) The department shall prepare the contents of the public notice, which shall, at a minimum, summarize the following:
   (a) Name, address, phone number of agency issuing the public notice;
   (b) Except when unknown in the case of general permit issuance, name and address of each applicant, and if different, of the facility or activity to be regulated;
   (c) Each applicant's activities or operations which result in a discharge (e.g., municipal waste treatment, steel manufacturing, drainage from mining activities);
   (d) Except in the case of general permit issuance, name of waterway to which each discharge is made and the location of each discharge on the waterway, indicating whether such discharge is a new or an existing discharge;
   (e) The tentative determination to issue or deny a permit for the discharge;
   (f) Where coverage by a general permit is replacing a current individual permit, notice of termination of the individual permit;
   (g) The procedures for the formulation of final determinations, including the thirty-day comment period required by subsection (2) of this section and any other means by which interested persons may comment upon those determinations; and
   (h) Address and phone number of state premises at which interested persons may obtain further information.

(4) The department shall provide copies of permit applications, draft permit determinations, requests for coverage, and general permits upon request.

(5) The department shall notify the applicant and persons who have submitted written comments or requested notice of the final permit decision. This notification shall include response to comments received and reference to the procedures for contesting the decision.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-050, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-050, filed 12/1/82; Order DE 76-20, § 173-220-050, filed 5/19/76; Order DE 74-7, § 173-220-050, filed 5/1/74; Order DE 74-1, § 173-220-050, filed 2/15/74.]

WAC 173-220-060 Fact sheets. (1) The department shall prepare a fact sheet for every draft permit determination regarding major dischargers, minor dischargers, and general permits. Such fact sheets shall, at a minimum, summarize the following:

(a) The type of facility or activity which is the subject of the application;

(b) The location of the discharge in the form of a sketch or detailed description;

(c) The type and quantity of the discharge, including at least the following:
   (i) The rate or frequency of the proposed discharge;
   (ii) For thermal discharges, the average summer and winter temperatures; and
   (iii) The average discharge in pounds per day, or other appropriate units, of any pollutants which are present in significant quantities or which are subject to limitations or prohibition under RCW 90.48.010, 90.52-040, 90.54.020 and sections 301, 302, 306, or 307 of the FWPCA and regulations published thereunder;

(d) The conditions in the proposed permit;

(e) The legal and technical grounds for the draft permit determination, including an explanation of how conditions meet both the technology-based and water quality-based requirements of the FWPCA and chapters 90.48, 90.52, and 90.54 RCW;

[1988 WAC Supp—page 424]
(f) The effluent standards and limitations applied to the proposed discharge;

(g) The applicable water quality standards, including identification of the uses for which receiving waters have been classified;

(h) How the draft permit addresses use or disposal of residual solids generated by wastewater treatment; and

(i) The procedures for the formulation of final determinations (in more detailed form than that given in the public notice) including:

(i) The thirty-day comment period required by WAC 173-220-050(2);

(ii) Procedures for requesting a public hearing and the nature thereof; and

(iii) Any other procedures by which the public may participate in the formulation of the final determinations.

(2) The department shall send a fact sheet to the applicant and, upon request, to any other person.

(3) The department shall add the name of any person upon request to a mailing list to receive copies of fact sheets.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-060, filed 1/1/88. Statutory Authority: Chapter 43.21A RCW. 86-06-040 (Order 86-03), § 173-220-060, filed 3/4/86. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-060, filed 12/1/82; Order DE 74-1, § 173-220-060, filed 2/15/74.]

WAC 173-220-070 Notice to other government agencies. The department shall notify other appropriate government agencies of each draft permit determination or request for coverage and shall provide such agencies an opportunity to submit their written views and recommendations. Such notification shall include the following:

(1) Unless the regional administrator has agreed to waive review, transmission of an application, fact sheet, and draft permit to the regional administrator for comment or objection within thirty days (ninety days for general permits), or a longer period if requested up to a maximum of ninety days.

(2) At the time of issuance of public notice pursuant to WAC 173-220-050, transmission of the public notice to any other states whose waters may be affected by the issuance of a permit. Each affected state shall be afforded an opportunity to submit written recommendations to the department and to the regional administrator which the department may incorporate into the permit if issued. Should the department fail to incorporate any written recommendations thus received, it shall provide to the affected state or states (and to the regional administrator) a written explanation of its reasons for failing to accept any of the written recommendations.

(3) Unless waived by the respective agency, the public notice shall be sent to the appropriate district engineer of the Army Corps of Engineers, the United States Fish and Wildlife Service, the National Marine Fisheries Service, the state departments of fisheries, natural resources, wildlife, and social and health services, the archaeology and historic preservation office, the agency responsible for the preparation of an approved plan pursuant to section 208(b) of the FWPCA, applicable Indian tribes and any other applicable government agencies.

(4) A copy of any written agreement between the department and an agency identified in subsection (3) of this section which waives the receipt of public notices shall be forwarded to the regional administrator and shall be made available to the public for inspection and copying.

(5) Copies of public notices shall be mailed to any other federal, state, or local agency, Indian tribe or any affected country, upon request. Such agencies shall have an opportunity to respond, comment, or request a public hearing pursuant to WAC 173-220-090.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-070, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-070, filed 12/1/82; Order DE 74-1, § 173-220-070, filed 2/15/74.]

WAC 173-220-080 Public access to information.

(1) In accordance with chapter 42.17 RCW, the department shall make records relating to NPDES permits available to the public for inspection and copying.

(2) The department shall protect any information (other than information on the effluent) contained in its NPDES permit records as confidential upon a showing by any person that such information, if made public, would divulge methods or processes entitled to protection as trade secrets of such person.

(3) Any information accorded confidential status, whether or not contained in an application form, shall be disclosed, upon request, to the regional administrator.

(4) The department shall provide facilities for the inspection of information relating to NPDES permits and shall insure that employees honor requests for such inspection promptly without undue requirements or restrictions. The department shall either (a) insure that a machine or device for the copying of papers and documents is available for a reasonable fee, or (b) otherwise provide for or coordinate with copying facilities or services such that requests for copies of nonconfidential documents may be honored promptly.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-080, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-080, filed 12/1/82; Order DE 74-1, § 173-220-080, filed 2/15/74.]

WAC 173-220-090 Public hearings. The applicant, any affected state, any affected interstate agency, any affected country, the regional administrator, or any interested agency or person may request a public hearing with respect to a draft permit determination or request for coverage by a general permit. Any such request for a public hearing shall be filed within the thirty-day period prescribed in WAC 173-220-050(2) and shall indicate the interest of the party filing such request and the reasons why a hearing is warranted. The department shall hold a hearing if it determines there is a significant
public interest. Instances of doubt will be resolved in favor of holding the hearing. Any hearing brought pursuant to this subsection shall be held at a time and place deemed appropriate by the department.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88--22--059 (Order 88--9), § 173--220--090, filed 11/1/88. Statutory Authority: RCW 90.48.010, 90.48.035, and 90.58.260. 83--10--063 (Order DE 83--14), § 173--220--090, filed 5/4/83; Order DE 74--1, § 173--220--090, filed 2/15/74.]

WAC 173--220--100 Public notice of public hearings. (1) The department shall circulate public notice of any hearing held pursuant to WAC 173--220--090 at least as widely as was the notice pursuant to WAC 173--220--050. Procedures for the circulation of public notice for hearings held under WAC 173--220--090 shall include at least the following:

(a) Notice shall be published in at least one major local newspaper of general circulation within the geographical area of the discharge;
(b) Notice shall be sent to all persons and government agencies who received a copy of the notice pursuant to WAC 173--220--050 or the fact sheet;
(c) Notice shall be mailed to any person upon request; and
(d) Notice shall be effected pursuant to (a) and (c) of this subsection at least thirty days in advance of the hearing.

(2) The contents of public notice of any hearing held in pursuant to WAC 173--220--090 shall include at least the following:

(a) Name, address, and phone number of agency holding the public hearing;
(b) A reference to the public notice issued pursuant to WAC 173--220--050, including identification number and date of issuance;
(c) The time and location for the hearing;
(d) The purpose of the hearing;
(e) Address and phone number of premises at which interested persons may obtain information;
(f) The nature of the hearing;
(g) The issues raised by the persons requesting the hearing, and any other appropriate issues which may be of interest to the public;
(i) Except when unknown in the case of general permit determinations, the name and address of each applicant whose proposed discharge will be considered at the hearing;
(ii) Except when unknown in the case of general permit determinations, the name of waterway to which each discharge is made and the location of each discharge on the waterway.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88--22--059 (Order 88--9), § 173--220--100, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82--24--078 (Order DE 82--39), § 173--220--100, filed 12/1/82; Order DE 74--1, § 173--220--100, filed 2/15/74.]

WAC 173--220--120 Prohibited discharges. No permit issued by the department shall authorize any person to:

(1) Discharge any radiological, chemical or biological warfare agent or high-level radioactive waste into surface waters of the state;

(2) Discharge any pollutants which the secretary of the army acting through the chief, corps of engineers, finds would substantially impair anchorage and navigation;

(3) Discharge any pollutant to which the regional administrator, not having waived his/her right to object pursuant to section 402(e) of the FWPCA, has objected in writing pursuant to section 402(d) of the FWPCA;

(4) Discharge from a point source any pollutant which is in conflict with the plan or amendment thereof approved pursuant to section 208(b) of the FWPCA;

(5) Discharge any pollutant subject to a toxic pollutant discharge prohibition under section 307 of FWPCA.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88--22--059 (Order 88--9), § 173--220--120, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82--24--078 (Order DE 82--39), § 173--220--120, filed 12/1/82; Order DE 74--1, § 173--220--120, filed 2/15/74.]

WAC 173--220--130 Effluent limitations, water quality standards and other requirements for permits. (1) Any permit issued by the department shall apply and insure compliance with all of the following, whenever applicable:

(a) All known, available, and reasonable methods of treatment required under RCW 90.52.040, 90.54.020 (3)(b), and 90.48.520; including effluent limitations established under sections 301, 302, 306, and 307 of the FWPCA. The effluent limitations shall not be less stringent than those based upon the treatment facility design efficiency contained in approved engineering plans and reports or approved revisions thereto. The effluent limitations shall reflect any seasonal variation in industrial loading. Modifications to technology-based effluent limitations for specific discharge categories are as follows:

(i) For combined waste treatment facilities, the effluent limitations for biochemical oxygen demand or suspended solids may be adjusted upwards to a maximum allowed by applying effluent limitations pursuant to sections 301 (b)(1)(B) of the FWPCA to the domestic portion of the influent and effluent limitations pursuant to sections 301 (b)(1)(A)(i), 301 (b)(2)(A), and 301 (b)(2)(E) of the FWPCA or standards of performance pursuant to section 306 of the FWPCA to the industrial portion of the influent: Provided, That the following additional condition is met:

Fecal coliform levels shall not exceed a monthly geometric mean of 200 organisms per 100 ml with a maximum weekly geometric mean of 400 organisms per 100 ml;

(ii) For municipal water treatment plants located on the Chehalis, Columbia, Cowlitz, Lewis, or Skagit river, the effluent limitations shall be adjusted, in accordance with RCW 90.54.020 (3)(b), to reflect credit for substances removed from the plant intake water if:

(A) The municipality demonstrates that the intake water is drawn from the same body of water into which the discharge is made; and
(B) The municipality demonstrates that no violation of receiving water quality standards or appreciable environmental degradation will result.

(b) Any more stringent limitation, including those necessary to:

(i) Meet water quality standards, treatment standards or schedules of compliance established pursuant to any state law or regulation under authority preserved to the state by section 510 of the FWPCA; or

(ii) Meet any federal law or regulation other than the FWPCA or regulations thereunder; or

(iii) Implement any applicable water quality standards; such limitations to include any legally applicable requirements necessary to implement total maximum daily loads established pursuant to section 303(d) and incorporated in the continuing planning process approved under section 303(e) of the FWPCA and any regulations and guidelines issued pursuant thereto;

(iv) Prevent or control pollutant discharges from plant site runoff, spillage or leaks, sludge or waste disposal, or materials handling or storage; and

(v) Meet the permit by rule provisions of the state dangerous waste regulation, WAC 173–303–802 (4) or (5).

(c) Any more stringent legal applicable requirements necessary to comply with a plan approved pursuant to section 208(b) of the FWPCA; and

(d) Prior to promulgation by the administrator of applicable effluent standards and limitations pursuant to sections 301, 302, 306, and 307 of the FWPCA, such conditions as the department determines are necessary to carry out the provisions of the FWPCA.

(2) In any case where an issued permit applies the effluent standards and limitations described in subsection (1)(a) of this section, the department shall make a finding that any discharge authorized by the permit will not violate applicable water quality standards.

(3) In the application of effluent standards and limitations, water quality standards and other legally applicable requirements pursuant to subsections (1) and (2) of this section, each issued permit shall specify:

(a) For industrial wastewater facilities, average monthly and maximum daily quantitative mass and/or concentration limitations, or other such appropriate limitations for the level of pollutants and the authorized discharge;

(b) For domestic wastewater facilities, average weekly and monthly quantitative concentration and mass limitations, or other such appropriate limitations for the level of pollutants and the authorized discharge; and

(c) If a dilution zone is authorized within which water quality standards are modified, the dimensions of such dilution zone.


WAC 173–220–140 Schedules of compliance. (1) The department shall establish schedules and permit conditions as follows to achieve compliance with applicable effluent standards and limitations, water quality standards, and other legally applicable requirements:

(a) With respect to any discharge which is found not to be in compliance with applicable effluent standards and limitations, applicable water quality standards, or other legally applicable requirements listed in WAC 173–220–130, the permittee shall be required to take specific steps to achieve compliance with the following: Any legally applicable schedule of compliance contained in:

(i) Section 301 of FWPCA;

(ii) Applicable effluent standards and limitations;

(iii) Water quality standards; and


(b) Schedules of compliance, shall set forth the shortest, reasonable period of time, to achieve the specified requirements, such period to be consistent with the guidelines and requirements of the FWPCA.

(2) In any case where the period of time for compliance specified in subsection (1)(a) of this section exceeds one year, a schedule of compliance shall be specified in the permit which will set forth interim requirements and the dates for their achievement; however, in no event shall more than one year elapse between interim dates. If the time necessary for completion of the interim requirement (such as construction of a treatment facility) is more than one year and is not readily divided into stages of completion, interim dates shall be specified for the submission of reports of progress toward completion of the interim requirement.

(3) Either before or up to fourteen days following each interim date and the final date of compliance, the permittee shall provide the department with written notice of the permittee's compliance or noncompliance with the interim or final requirement.

(4) On the last day of the months of February, May, August, and November, the department shall transmit to the regional administrator a list of all instances in the previous ninety days of failure or refusal of a major permittee to comply with an interim or final requirement. Such list shall be available to the public for inspection and copying and shall contain at least the following information on each instance of noncompliance:

(a) Name and address of each noncomplying permittee;

(b) A short description of each instance of noncompliance (e.g., failure to submit preliminary plans, delay in commencement of construction of treatment facility, failure to notify department of compliance with an interim requirement, etc.)

(c) A short description of any actions or proposed actions by the permittee or the department to comply or enforce compliance with the interim or final requirement; and

(d) Any details which explain or mitigate an instance of noncompliance with an interim or final requirement.

(5) If a permittee fails or refuses to comply with an interim or final requirement in a permit, such noncompliance shall constitute a violation of the permit for
which the department may modify or revoke the permit or take direct enforcement action.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW, 88-22-059 (Order 88-9), § 173-220-140, filed 1/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260, 82-24-078 (Order DE 82-39), § 173-220-140, filed 12/1/82; Order DE 74-1, § 173-220-140, filed 2/15/74.]

WAC 173-220-150 Other terms and conditions. (1) In addition to the requirements of WAC 173-220-130 and 173-220-140, each issued permit shall require that:

(a) All discharges authorized by the permit shall be consistent with the terms and conditions of the permit;

(b) Any facility expansions, production increases or process modifications which would result in new or increased discharges of pollutants causing effluent limitations in the permit to be exceeded must be reported to the department by submission of a new application or supplement thereto; or, if such discharge does not violate effluent limitations specified in the permit, by submission to the department of notice of such new or increased discharges of pollutants;

(c) Any discharge of any pollutant more frequent than or at a level in excess of that identified and authorized by the permit shall constitute a violation of the terms and conditions of the permit;

(d) The permit may be modified or revoked in whole or in part during its terms for cause including, but not limited to, the following:

(i) Violation of any term or condition of the permit;

(ii) Obtaining a permit by misrepresentation or failure to disclose fully all relevant facts;

(iii) A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge;

(iv) A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations;

(v) Incorporation of an approved local pretreatment program into a municipality's permit;

(vi) Establishment of a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) under section 307(a) of the FWPCA for a toxic pollutant which is more stringent than any limitation upon such pollutant in the permit;

(vii) Failure or refusal of the permitting to allow entry as required in RCW 90.48.090; and

(viii) Nonpayment of permit fees assessed pursuant to RCW 90.48.610.

(e) The permittee shall allow the department or its authorized representative upon the presentation of credentials and at reasonable times:

(i) To enter upon permittee's premises in which an effluent source is located or in which any records are required to be kept under terms and conditions of the permit, subject to any access restrictions due to the nature of the project;

(ii) To have access to, and copy at reasonable cost, any records required to be kept under terms and conditions of the permit;

(iii) To inspect any monitoring equipment or method required in the permit; and

(iv) To sample any discharge of pollutants.

(f) If the permit is for a discharge from a publicly owned treatment works, the permittee shall provide notice to the department of the following:

(i) Any new introduction of pollutants into such treatment works from a source which would be a new source as defined in section 306 of the FWPCA if such source were discharging pollutants;

(ii) Except as to such categories and classes of point sources or discharges specified by the department, any new introduction of pollutants into such treatment works from a source which would be subject to section 301 of the FWPCA if such source were discharging pollutants;

(iii) Any substantial change in volume or character of pollutants being introduced into such treatment works by a source existing at the time of issuance of the permit.

Such notice shall include information on:

(A) The quality and quantity of effluent to be introduced into such treatment works; and

(B) Any anticipated impact of such change in the quantity or quality of effluent to be discharged from such publicly owned treatment works.

(g) The permittee shall at all times properly operate and maintain any facilities or systems of control installed by the permittee to achieve compliance with the terms and conditions of the permit. Where design criteria have been established, the permittee shall not allow flows or waste loadings to exceed approved design criteria, or approved revisions thereto.

(2) Every permit shall be conditioned to insure that any industrial user of any publicly owned treatment works will comply with sections 204(b), 307, and 308 of the FWPCA.

(3) When deemed necessary by the department, any publicly owned treatment works shall be required to develop a full or partial local pretreatment program as specified in 40 CFR Part 403. Permit conditions for a municipality which has received full local pretreatment program approval shall include:

(a) Granting of authority to issue permits under chapter 173-208 WAC;

(b) A requirement to develop, adopt, and enforce a program that is at least as stringent as the department's program under chapter 173-216 WAC; and

(c) A requirement to report to the department at a specified frequency on the status of its implementation.

(4) Permits for domestic wastewater facilities shall be issued only to a public entity, except in the following circumstances:

(a) Facilities existing or approved for construction with private operation on or before the effective date of this chapter, until such time as the facility is expanded; or

(b) Facilities that serve a single nonresidential, industrial, or commercial establishment. Commercial/industrial complexes serving multiple owners or tenants and multiple residential dwelling facilities such as mobile home parks, apartments, and condominiums are not
considered single commercial establishments for the purpose of the preceding sentence.

(5) For facilities that are owned by nonpublic entities and under contract to a public entity, the permit shall be issued to the public entity.


WAC 173-220-160 Transmission of issued permit to regional administrator. Immediately following issuance, the department shall transmit a copy of every issued permit along with any and all terms, conditions, requirements, or documents which are a part of such permit or which affect the authorization by the permit of the discharge of pollutants to the regional administrator.


WAC 173-220-180 Duration and replacement of existing permit. (1) Permits shall be issued for fixed terms not exceeding five years.

(2) Any permittee shall make application for replacement to an existing permit or continuation of a discharge beyond the expiration date of his/her permit by filing with the department an application for replacement of the permit at least one hundred eighty days prior to its expiration.

(3) The scope and manner of any review of an application for replacement of a permit by the department shall be sufficiently detailed as to insure the following:

(a) That the permittee is in substantial compliance with all of the terms, conditions, requirements and schedules of compliance of the expired permit;

(b) That the department has up-to-date information on the permittee's production levels; permittee's waste treatment practices; nature, content and frequencies of permittee's discharge; either pursuant to the submission of new forms and applications or pursuant to monitoring records and reports resubmitted to the department by the permittee; and

(c) That the discharge is consistent with applicable effluent standards and limitations, water quality standards, and other legally applicable requirements listed in WAC 173-220-130.

(4) The notice and public participation procedures specified in WAC 173-220-050 through 173-220-100 are applicable to each draft replacement permit.

(5) When a permittee has made timely and sufficient application for the renewal of a permit, an expiring permit remains in effect and enforceable until the application has been denied or a replacement permit has been issued by the department.

(6) Notwithstanding any other provision in this chapter, any point source, the construction of which is commenced after the date of enactment of the Federal Water Pollution Control Act amendments of 1972 and which is so constructed as to meet all applicable standards of performance, shall not be subject insofar as the FWPCA is concerned to any more stringent standard of performance during a ten year period beginning on the date of completion of such construction or during the period of depreciation or amortization of such facility for the purposes of section 167 or 169 (or both) of the Internal Revenue Code of 1954, whichever period ends first.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-150, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-180, filed 12/1/82; Order DE 74-1, § 173-220-180, filed 2/15/74.]

WAC 173-220-190 Modification and revocation of permits. (1) Any permit issued under this chapter can be modified or revoked in whole or in part by the department for cause including, but not limited to, the causes listed in WAC 173-220-150 (1)(d) or when remanded to the department for modification by the pollution control hearings board.

(2) The department may, upon request of the permittee, modify a schedule of compliance or an operating condition in an issued permit if it determines good and valid cause exists for such revision (such as an act of God, strike, flood, materials shortage, or other event over which the permittee has little or no control and for which there is no other reasonably available remedy).

(3) The department shall modify or revoke permits only after public notice and opportunity for public hearing as provided in this chapter in those instances where changes are proposed which lessen the stringency of effluent limitations. In all other instances, the form of public notice and public participation, if any, shall be determined by the department on a case-by-case basis according to the significance of the proposed action.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-190, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-190, filed 12/1/82; Order DE 74-1, § 173-220-190, filed 2/15/74.]

WAC 173-220-200 Transfer of permit. (1) A permit is automatically transferred to a new discharger if:

(a) A written agreement between the old and new discharger containing a specific date for transfer of permit responsibility, coverage, and liability is submitted to the director; and

(b) The director does not notify the old and new discharger of his/her intent to modify, or revoke and reissue the permit. If this notice is not given, the transfer is effective on the date specified in the agreement mentioned in (a) of this subsection.

(2) Unless a permit is automatically transferred according to subsection (1) of this section, a permit may be transferred only if modified or revoked and reissued.
to identify the new permittee and incorporate such other requirements as may be necessary.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-200, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-200, filed 12/1/82; Order DE 74-1, § 173-220-200, filed 2/15/74.]


(a) Any discharge authorized by a permit may be subject to such monitoring requirements as may be reasonably required by the department, including the installation, use, and maintenance of monitoring equipment or methods (including, where appropriate, biological monitoring methods). These monitoring requirements would normally include:

(i) Flow (in gallons per day);
(ii) Pollutants (either directly or indirectly through the use of accepted correlation coefficients or equivalent measurements) which are subject to reduction or elimination under the terms and conditions of the permit;
(iii) Pollutants which the department finds could have a significant impact on the quality of surface waters; and
(iv) Pollutants specified by the administrator, in regulations issued pursuant to the FWPCA, as subject to monitoring.

(b) Each effluent flow or pollutant required to be monitored pursuant to (a) of this subsection shall be monitored at intervals sufficiently frequent to yield data which reasonably characterizes the nature of the discharge of the monitored effluent flow or pollutant.

Variable effluent flows and pollutant levels may be monitored at more frequent intervals than relatively constant effluent flows and pollutant levels which may be monitored at less frequent intervals.

(c) Monitoring of intake water, influent to treatment facilities, internal waste streams, and/or receiving waters may be required when determined necessary by the department to verify compliance with net discharge limitations or removal requirements, to verify that proper waste treatment or control practices are being maintained, or to determine the effects of the discharge on the surface waters of the state.

(2) Recording of monitoring activities and results. Any permit which requires monitoring of the authorized discharge shall require that:

(a) The permittee shall maintain records of all information resulting from any monitoring activities required of him in his permit;

(b) Any records of monitoring activities and results shall include for all samples:

(i) The date, exact place, and time of sampling;
(ii) The dates analyses were performed;
(iii) Who performed the analyses;
(iv) The analytical techniques/methods used; and
(v) The results of such analyses; and

(c) The permittee shall be required to retain for a minimum of three years any records of monitoring activities and results including all original strip chart recording for continuous monitoring instrumentation and calibration and maintenance records. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or when requested by the department or regional administrator.

(3) Reporting of monitoring results.

(a) The permittee shall periodically report (at a frequency of not less than once per year) on the proper reporting form, the monitoring results obtained pursuant to monitoring requirements in a permit. In addition to the required reporting form, the department at its discretion may require submission of such other results as it determines to be necessary.

(b) Monitoring reports shall be signed by:

(i) In the case of corporations, by a responsible corporate officer or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates.

(ii) In the case of a partnership, by a general partner.

(iii) In the case of a sole proprietorship, by the proprietor.

(iv) In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.


WAC 173-220-220 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-220-225 Appeals. (1) Individual permits are subject to appeals as specified in chapter 43.21B RCW.

(2) For general permits: (a) The terms and conditions of a general permit as they apply to the appropriate class of dischargers is subject to appeal within thirty days of issuance of a general permit in accordance with chapter 43.21B RCW; (b) the terms and conditions of a general permit as they apply to an individual discharger are subject to appeal in accordance with chapter 43.21B RCW within thirty days of the effective date of coverage of that discharger. Consideration of an appeal of general permit coverage of an individual discharger is limited to the general permit's applicability or nonapplicability to that discharger. Appeal of general permit coverage of an individual discharger does not affect any other individual dischargers. If the terms and conditions of a general permit are found to be inapplicable to any discharger, the matter shall be remanded to the department for consideration of issuance of an individual permit.

[Statutory Authority: RCW 90.54.020 and chapter 90.48 RCW. 88-22-059 (Order 88-9), § 173-220-225, filed 11/1/88. Statutory Authority: RCW 90.48.035 and 90.48.260. 82-24-078 (Order DE 82-39), § 173-220-225, filed 12/1/82.]
Chapter 173-221 WAC
DISCHARGE STANDARDS AND EFFLUENT LIMITATIONS FOR DOMESTIC WASTEWATER FACILITIES

WAC
173-221-010 Purpose and scope.
173-221-020 Policy.
173-221-030 Definitions.
173-221-040 Domestic wastewater facility discharge standards.
173-221-050 Alternative domestic wastewater facility discharge standards and effluent limitations.
173-221-100 Severability.

WAC 173-221-010 Purpose and scope. (1) The purpose of this chapter is to implement RCW 43.21A-.010, 90.48.010, and 90.52.040 by setting discharge standards which represent "all known, available, and reasonable methods" of prevention, control, and treatment for domestic wastewater facilities which discharge to waters of the state. This chapter supplements WAC 173-220-130. Guidelines or policies of the department not included in this chapter are not affected by this chapter, except that if such guidelines or policies are in conflict, the requirements of this chapter shall take precedence.

(2) This chapter also supplements 40 CFR Part 133; Secondary Treatment Regulation. Wherever this chapter is more stringent than the federal regulation, the requirements of this chapter shall take precedence.

[Statutory Authority: RCW 90.48.035 and 90.48.260, 87-23-020 (Order 87-26), § 173-221-010, filed 11/12/87.]

WAC 173-221-020 Policy. Waters of the state shall be of the highest possible quality. Regardless of the quality of the waters of the state, all wastes and other materials and substances proposed for discharge into said waters shall be provided with all known, available, and reasonable methods of treatment prior to discharge. Even though standards of quality established for the waters of the state would not be violated, wastes and other materials and substances shall not be allowed to enter such waters which will reduce the existing quality thereof, except (1) in those situations where it is clear that overriding considerations of the public interest will be served, and (2) they receive all known, available, and reasonable methods of treatment prior to discharge.

[Statutory Authority: RCW 90.48.035 and 90.48.260, 87-23-020 (Order 87-26), § 173-221-020, filed 11/12/87.]

WAC 173-221-030 Definitions. As used in this chapter, unless the context indicates otherwise:

(1) "Seven-day average" means the arithmetic mean of pollutant parameter values for samples collected in a period of seven consecutive days. The department may use pollutant parameter values for samples collected in a calendar week for determining compliance with permit conditions.

(2) "Thirty-day average" means the arithmetic mean of pollutant parameter values for samples collected in a period of thirty consecutive days. The department may use pollutant parameter values for samples collected in a calendar month for determining compliance with permit conditions.

(3) "BOD" means five-day biochemical oxygen demand.

(4) "CBOD" means five-day carbonaceous biochemical oxygen demand.

(5) "Combined sewer" means a sewer which has been designed to serve as a sanitary sewer and a storm sewer, and into which inflow is allowed by local ordinance.

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

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

(8) "Discharge standard" means a minimum performance requirement established in regulation by the department. Effluent limitations for a pollutant parameter shall not be less stringent than the applicable discharge standard.

(9) "Domestic wastewater" means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places, together with such ground water infiltration or surface waters as may be present.

(10) "Domestic wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim, or dispose of domestic wastewater together with such industrial waste as may be present. In the case of subsurface sewage treatment and disposal, the term is restricted to mean those facilities treating and disposing of domestic wastewater only from:

(a) A septic tank system with subsurface sewage treatment and disposal and an ultimate design capacity exceeding fourteen thousand five hundred gallons per day at any common point; or

(b) A mechanical treatment system or lagoon followed by subsurface disposal with an ultimate design capacity exceeding three thousand five hundred gallons per day at any common point.

Where the proposed system utilizing subsurface disposal has received a state construction grant or a federal construction grant under the Federal Water Pollution Control Act as amended, such system is a "domestic wastewater facility" regardless of size.

(11) "Effluent concentrations consistently achievable through proper operation and maintenance" means:

(a) For a given pollutant parameter, the 95th percentile value for the thirty–day average effluent quality achieved by a wastewater facility in a period of at least twenty–four consecutive months, excluding values attributable to equipment failures, operational errors, overloading, and other unusual conditions; and

(b) A seven–day average value equal to 1.5 times the value derived under (a) of this subsection.

(12) "Effluent limitation" means any restriction, prohibition, or specification established by the department in a permit or administrative order on:

(a) Quantities, rates, percent removals, and/or concentrations of physical, chemical, or biological characteristics of wastes which are discharged into waters of the state; and

[1988 WAC Supp—page 431]
(b) Management practices relevant to the prevention or control of such waste discharges.

Effluent limitations shall be derived from discharge standards and other relevant factors identified in chapter 173-220 WAC.

(13) "Expansion" means the construction of additional treatment units to accommodate hydraulic flow and/or pollutant load for the purpose of increasing the existing design capacity of the wastewater facility.

(14) "Fecal coliform" means the group of coliform bacteria which originate in the intestinal tract of warm-blooded animals.

(15) "Industrial wastewater" means the water or liquid carried wastes from industrial or commercial processes as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade, or business, from the development of any natural resource, or from animal operations such as feedlots, poultry houses, or dairies. The term includes contaminated stormwater and also leachate from solid waste facilities.

(16) "Infiltration" means the addition of ground water into a sewer through joints, the sewer pipe material, cracks, and other defects.

(17) "Inflow" means the addition of rainfall—caused surface water drainage from roof drains, yard drains, basement drains, street catch basins, etc., into a sewer.

(18) "Interfere with" means a discharge by an industrial user which, alone or in conjunction with discharges by other sources, inhibits or disrupts the domestic wastewater facility, its treatment processes or operations, or its sludge processes, use or disposal and which is a cause of a violation of any requirement of the domestic wastewater facility's permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal by the domestic wastewater facility in accordance with the following statutory provisions and regulations or permits issued thereunder (or more stringent state or local regulations): Section 405 of the Federal Water Pollution Control Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA)), and including state regulations contained in any state sludge management plan prepared pursuant to Subtitle D or the SWDA, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection Research and Sanctuaries Act.

(19) "Permittee" means the entity to which the department issues a permit.

(20) "pH" means the negative logarithm of the hydrogen ion concentration.

(21) "Sanitary sewer" means a sewer which is designed to convey domestic wastewater and infiltration.

(22) "State" means the state of Washington.

(23) "Trickling filter" means a fixed growth biological treatment system in which wastewater is sprayed over the top surface of a column of rock or synthetic media. This definition does not include fixed growth biological systems which have a supplemental biological treatment system, other than a waste stabilization pond(s), for the principal wastewater stream.

(24) "TSS" means total suspended solids.

(25) "TSS concentrations achievable with waste stabilization ponds" means a TSS value, determined by the department, which is equal to the effluent concentrations achieved ninety percent of the time within the state or appropriate contiguous geographical area by waste stabilization ponds that are achieving the levels of effluent quality for BOD specified in WAC 173-221-050 (2)(a).

(26) "Waste stabilization pond" means basins built by excavating the ground and by diking for the purpose of treating wastewater under conditions that favor natural biological treatment and accompanying bacterial reduction. This includes domestic wastewater facilities which are classified as stabilization ponds, or aerated lagoons per the department's Criteria for Sewage Works Design.

(27) "Wastewater facility" means all structures and equipment required to collect, transport, treat, reclaim, or dispose of domestic, industrial, or combined domestic/industrial wastewaters.

(28) "Waters of the state" means all lakes, rivers, ponds, streams, inland waters, ground waters, salt waters, and all other waters and watercourses within the jurisdiction of the state of Washington.

(29) "Water quality standards" means the standards set forth in chapter 173-201 WAC.

(30) "Wet weather" means the time during and immediately following rainfall events which cause large quantities of inflow.

[WAC 173-221-040 Domestic wastewater facility discharge standards. (1) Except as allowed under WAC 173-221-050, domestic wastewater facilities which discharge to surface waters shall not exceed a thirty-day average of 30 milligrams per liter (mg/L) BOD, 30 mg/L TSS. Seven-day averages shall not exceed 45 mg/L BOD, 45 mg/L TSS. Additionally, the thirty-day average percent removals of BOD and TSS shall not be less than eight-five percent of influent concentrations.

(2) Fecal coliform limits shall not exceed a monthly geometric mean of 200 organisms/100 milliliters (mL), and a weekly geometric mean of 400 organisms per 100 mL.

(3) The effluent pH value shall be between 6.0 and 9.0 standard units unless the permittee demonstrates that:

(a) Inorganic chemicals are not added to the waste stream as part of the treatment process; and

(b) Contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than 9.0; and

(c) The discharge does not cause water quality violations outside of an approved dilution zone.

[WAC 173-221-050 Alternative domestic wastewater facility discharge standards and effluent limitations. (1) Alternative discharge standards for trickling filters
which were constructed and/or expanded prior to November 1984 are:

(a) Up to a thirty-day average of 45 mg/L BOD, 45 mg/L TSS. Seven-day averages shall not exceed 65 mg/L BOD, 65 mg/L TSS. In addition, the thirty-day average percent removals of BOD and TSS shall not be less than sixty-five percent of influent concentrations;

(b) Notwithstanding (a) of this subsection, not any less stringent than "effluent concentrations consistently achievable through proper operation and maintenance" of the wastewater facility based on an analysis of the past performance, the design, and the design capacity of the wastewater facility;

(c) Fecal coliform and pH discharge standards are as established in WAC 173-221-040.

(2) Alternative discharge standards for waste stabilization ponds which are the principal treatment process and which either have less than a two million gallon per day design capacity or have received, prior to the effective date of this regulation, the department’s approval under chapter 173-240 WAC, for a greater design capacity, are:

(a) Up to a thirty-day average of 45 mg/L BOD, 45 mg/L TSS. Seven-day averages shall not exceed 65 mg/L BOD, 65 mg/L TSS. Additionally, the thirty-day average percent BOD removal shall not be less than sixty-five percent of influent concentrations.

(b) The discharge standards for TSS in (a) of this subsection may be adjusted by the department to conform to the "TSS concentrations achievable with waste stabilization ponds," provided that operation and maintenance data indicate that the TSS values specified in (a) of this subsection cannot be achieved.

(c) Notwithstanding (a) and (b) of this subsection, not any less stringent than "effluent concentrations consistently achievable through proper operation and maintenance" of the wastewater facility based on an analysis of the past performance.

(d) Fecal coliform and pH discharge standards shall be as established in WAC 173-221-040.

(3) For domestic wastewater facilities which receive flows from combined sewers, the department shall decide on a case-by-case basis whether any attainable percent removal can be defined during wet weather. If it can be defined, the department will set an alternative percent removal effluent limitation for the wet weather period. A permittee who requests such alternative limits shall submit supporting documentation to the department.

(4) (a) For domestic wastewater facilities which receive less concentrated influent wastewater, permittees can request and submit supporting documentation for:

(i) A lower percent removal effluent limitation than the discharge standards set forth in WAC 173-221-040, or subsections (1) and (2) of this section; or

(ii) A mass loading limit based upon the lower percent removal.

(b) To qualify for alternative effluent limitations because of less concentrated influent wastewater, the permittee must demonstrate:

(i) The wastewater facility is consistently achieving, and/or will consistently achieve, the effluent concentration limits and mass limits based upon the effluent concentrations in its permit; and

(ii) That to meet the percentage removal requirements set forth in WAC 173-221-040 or subsections (1) and (2) of this section, the wastewater facility would have to achieve an effluent concentration at least 5 mg/L below the effluent concentration which is otherwise required; and

(iii) The less concentrated influent is not the result of excessive infiltration and/or inflow. The department will use federal regulations and guidance in defining excessive infiltration and inflow; and

(iv) The development and implementation of a program, subject to the department’s approval, for ongoing wastewater facility maintenance, repair, and replacement, including infiltration and inflow control. A goal of the program shall be eventual achievement of the percent removal requirements specified in WAC 173-221-040 and subsection (1) or (2) of this section, whichever is applicable. The department shall incorporate the approved infiltration and inflow control program into the permit for the wastewater facility.

(5) Subject to the department’s approval, a request for alternative effluent limitations pursuant to subsections (1) through (4) of this section must meet all of the following conditions:

(a) The effluent shall not cause water quality violations; and

(b) The permittee shall identify effluent concentrations consistently achievable through proper operation and maintenance; and

(c) The permittee shall demonstrate that industrial wastewater does not interfere with the domestic wastewater facility; and

(d) The wastewater facility must be within department approved hydraulic and organic design capacity; and

(e) The permittee must complete an analysis of whether seasonal alternative effluent limits are more appropriate than year-round; and

(f) The wastewater facility must be able to meet all other permit requirements and conditions.

(6) (a) At the option of the department, in lieu of the parameter BOD and the levels of the BOD effluent quality specified in WAC 173-221-040, the parameter CBOD may be substituted as an effluent limitation with the following levels of the CBOD effluent quality provided: The thirty-day average shall not exceed 25 mg/L. The seven-day average shall not exceed 40 mg/L. Additionally, the thirty-day average percent removal shall not be less than eighty-five percent of the influent concentration.

(b) At the option of the department, in lieu of the parameter BOD and the levels of the BOD effluent quality specified in subsections (1) and (2) of this section, the parameter CBOD may be substituted as an effluent limitation on a case-by-case basis where data are available. The levels of CBOD effluent quality shall not be less stringent than the following: The thirty-day average

[1988 WAC Supp—page 433]
shall not exceed 40 mg/L. The seven–day average shall not exceed 60 mg/L. The thirty–day average percent removal shall not be less than sixty-five percent of the influent concentration.

c) Permittee applications for substitution of CBOD for BOD under (b) of this subsection shall include parallel CBOD and BOD data.

[Statutory Authority: RCW 90.48.035 and 90.48.260. 87–23–020 (Order 87–26), § 173–221–050, filed 11/12/87.]

WAC 173–221–100 Severability. If any provision of this chapter or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this chapter which can be given effect without the invalid provision or application.

[Statutory Authority: RCW 90.48.035 and 90.48.260. 87–23–020 (Order 87–26), § 173–221–100, filed 11/12/87.]

Chapter 173–222 WAC
WASTEWATER DISCHARGE PERMIT FEES


WAC 173–222–015 Applicability. This chapter applies to all permit applications received by the department after July 28, 1985. This chapter does not apply to permits issued after June 30, 1988.


Chapter 173–223 WAC
INTERIM WASTEWATER DISCHARGE PERMIT FEES

WAC 173–223–015 Purpose and authority. It is the purpose of this chapter to establish an interim fee system for permits issued by the department of ecology pursuant to RCW 90.48.160, 90.48.162, and 90.48.260. This fee system is subject to change in fiscal year 1990 and beyond. RCW 90.48.610 authorizes the department to charge fees to recover administrative expenses incurred in the issuance and administration of wastewater discharge permits. Annual operating fees shall be based on seven fee eligible categories listed in RCW 90.48.600:

1. Processing permit applications and modifications;
2. Monitoring and evaluating compliance with permits;
3. Conducting inspections;
4. Securing laboratory analysis of samples taken during inspections;
5. Reviewing required plans and documents directly related to operations of permittees;
6. Monitoring compliance with delegated pretreatment programs; and
7. Supporting the overhead expenses that are directly related to each of the preceding activities. Expenses start when a permit application is filed with the department of ecology.

[Statutory Authority: Chapter 43.21A RCW. 88–12–035 (Order 88–8), § 173–223–015, filed 5/26/88, effective 7/1/88.]

WAC 173–223–020 Applicability. This chapter applies to all persons or entities holding a waste discharge permit issued pursuant to RCW 90.48.160, 90.48.162, and 90.48.260, including persons or entities holding permits that remain in effect under WAC 173–216–040 or 173–220–180(5) and RCW 90.48.200.


(1) "Annual fee" means the fee which is paid annually based on the state's fiscal year (July 1 to June 30).

(2) "Concentrated animal feeding operation" means an "animal feed operation" which meets the criteria in Appendix B of 40 CFR 122.23 (b)(3).

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

(4) "Director" means the director of the department of ecology or authorized representative.

(5) "EPA" means the United States Environmental Protection Agency.

(6) "GPD" means permitted flow expressed in gallons per day.

(7) "Industrial facility" means any facility not included in definition of "municipal/domestic facility."

(8) "Major facility" means any NPDES permitted facility or activity classified as such by the Region 10 administrator of the Environmental Protection Agency in conjunction with the director as published in the state–EPA agreement for fiscal year 1988. Other facilities may be classified by agreement between EPA and the department based on EPA criteria following submittal of an application for a new source permit or permit modification.

(9) "MGD" means permitted flow expressed in million gallons per day.

(10) "Municipal/domestic facility" means a publicly–owned facility treating domestic wastes together with such industrial wastes as may be present, or a privately–owned facility treating domestic wastes.

(11) "Noncontact cooling water" means water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product, or finished product, and which does not contain chemicals added by the permittee.
(12) "NPDES permit" means the National Pollutant Discharge Elimination System permit issued by the department pursuant to section 402 of the Federal Clean Water Act and RCW 90.48.260.

(13) "Permit fee" means that fee charged by the department of ecology for expenses associated with the activities specified in WAC 173-223-015.

(14) "Person" means any political subdivision, government agency, municipality, industry, public or private corporation, copartnership, association, firm, individual, or any other entity whatsoever.

(15) "Permitted flow" means:
   (a) For municipal/domestic facilities, the monthly average flow limitation contained in the permit;
   (b) For industrial facilities, the daily maximum flow limitation contained in the permit;
   (c) For permits in which a flow limit is not specified, the department shall use the design flow corresponding to (a) or (b) of this subsection.

(16) "Residential equivalent" means:
   (a) For residential hookups, a single family residential unit; and for industrial or commercial hookups, a flow quantity of two hundred fifty gallons per day, or a biochemical oxygen demand quantity of 0.5 pounds per day, or a total suspended solids quantity of 0.5 pounds per day whichever basis yields the highest number; or
   (b) A definition of residential equivalent submitted by the permittee and approved by the department that yields substantially similar results to (a) of this subsection.

(17) "State waste discharge permit" means a permit required under chapter 173-216 WAC.

[Statutory Authority: Chapter 43.21A RCW. 88-12-035 (Order 88-8), § 173-223-030, filed 5/26/88, effective 7/1/88.]

WAC 173-223-040 Permit fee schedule. Tables 1, 2, and 3.
(1) Industrial categories.
(2) Municipal/domestic categories.
(3) Special primary industry categories.

Table 1

<table>
<thead>
<tr>
<th>INDUSTRIAL CATEGORIES</th>
<th>ANNUAL PERMIT FEE</th>
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</thead>
<tbody>
<tr>
<td>Major industries listed in Table 3</td>
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<tr>
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<tr>
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<td>Minor industries not listed in Table 3 discharging noncontact cooling water only</td>
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<td>Water treatment plants</td>
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<td>Concentrated animal feeding operations</td>
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Table 2

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<tr>
<th>Permitted Flows</th>
<th>Minor Facility</th>
<th>Major Facility</th>
<th>Facility w/Pretreatment*</th>
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</table>

*Municipal/domestic facilities with delegated pretreatment programs as authorized by the Federal Water Pollution Control Act.

Table 3

Special Industrial Categories
- Adhesives and sealants
- Aluminum forming
- Battery manufacturing and recycling
- Coal mining
- Coil coating
- Copper forming
- Electrical and electronic components
- Electroplating
- Explosives
- Gum and wood chemicals
- Inorganic chemicals manufacturing
- Iron and steel manufacturing
- Leather tanning and finishing
- Metal finishing
- Metal molding and casting
- Nonferrous metals forming and metal powders
- Nonferrous metals manufacturing
- Nuclear fuels
- Ore mining and dressing
- Organic chemicals manufacturing
- Paint and ink formulation
- Pesticides
- Petroleum refining
- Pharmaceutical manufacturing
- Plastics molding and forming
- Plastic and synthetic materials manufacturing
- Porcelain enameling
- Printing and publishing
- Pulp, paper, and paperboard
- Rubber manufacturing
- Shipyards

[1988 WAC Supp—page 435]
WAC 173-223-050 Permit fee payments. (1) Permit fee computation. Computation of fees shall begin on the first day of each fiscal year, or in the case of facilities or activities not previously covered by permits, on the issuance date of the permit. In the case of applicants for state waste discharge permits who are deemed to have a temporary permit under RCW 90.48.200, computation shall begin on the sixty-first day after the department receives an application. Computation of fees shall end on the last day of the state's fiscal year, or in the case of a terminated permit, on the date of termination. Computation shall end on the expiration date of a permit only if a permit holder has indicated to the department in writing that the permitted activity has been terminated.

(2) The department shall charge fees based on the annual fee schedule contained in WAC 173-223-040. The department may charge fees at the beginning of the year to which they apply. The department shall notify permit holders of fee charges by mailing billing statements. Fee payment shall be due and payable thirty days after the department mails a billing statement. The department may elect to bill permit holders a prorated portion of the annual fee on a monthly, quarterly, or other periodic basis, and may adjust fees downward from the fee schedule if necessary to assure that total fees collected are within the maximum amount allowed under RCW 90.48.600 (three million six hundred thousand dollars per year). In cases where a permit is only in effect for a portion of the fiscal year upon which the annual fee is based, the department shall prorate the fee accordingly. In addition to other circumstances, this applies where the department terminates a permit upon its determination that an industry which discharges to a municipal sewer system is satisfactorily regulated by a local pretreatment program.

(3) Delayed payment. In cases where payment of the total amount of fee charges, by the due date specified in this subsection, would cause substantial economic hardship, a permit holder may request that the department allow delayed payment. Such a request must be submitted to the department's fiscal office in writing by the permit's payment due date, and must include information demonstrating that such a hardship would occur. The department may approve such a request provided that the permit holder enters into a written agreement with the department to pay the fee charges and interest as specified in WAC 173-223-030, according to a specific delayed schedule, and that all fee and interest charges shall be paid in full by the fifteenth day of the last month of the year for which the fee is due.

(4) The applicable permit fee shall be paid by check or money order payable to the department of ecology, and mailed to the Department of Ecology, Fiscal Office, Mailstop PV-11, Olympia, Washington 98504.

(5) In the event checks are returned due to insufficient funds, fees shall be deemed not to have been paid.

(6) Interest due on delinquent or delayed accounts. The department shall charge permit holders interest on fee charges that have not been paid by the due date at the rate of ten percent per annum, compounded monthly. Interest charges shall be due and payable in the same manner as fees, and nonpayment of interest charges shall be deemed as nonpayment of fees for purposes of collection and enforcement.

(7) Enforcement for nonpayment. If a permit holder has failed to pay fee charges that are due and payable, the department shall give notice of intent to terminate the permit after thirty days in accordance with RCW 90.48.190 unless fee and interest charges are paid in full within that time. Such notice shall be given by certified mail or by personal delivery, and shall state the exact amount due and the date by which the charges must be paid. If the full payment is not received by the department by the specified date, the department shall promptly issue an order terminating the permit. Such order shall be transmitted by certified mail or by personal delivery. Following termination of a permit, if the activity requiring a permit continues, the department shall either commence issuing civil penalties under RCW 90.48.144, or shall file an action to enjoin the activity previously authorized by the permit in a court of jurisdiction, or both. Civil penalties issued by the department shall be sufficiently large to offset the economic benefit gained from nonpayment of fees and to deter continued operation and/or nonpayment. Payment of civil penalties shall not be deemed as payment of fees, nor shall payment of fees after assessment of penalties be deemed as a cause for reducing the penalty: Provided, That the department may reduce or set aside penalties upon a determination that it made a factual error or errors in assessing the penalty. Nothing herein shall be interpreted as restricting the authority of the department to exercise its other enforcement remedies as authorized by law.

WAC 173-223-060 Permits issued by other governmental agencies. The department shall not charge fees for permits issued by a city, town, or municipal corporation under RCW 90.48.165, nor for permits issued by the energy facilities site evaluation council under RCW 80.50.071, nor for permits administered by the EPA under 33 U.S.C. 1251, et seq. Nothing herein shall restrict the department from charging fees to recover administrative expenses of permits it issues under RCW 90.48-.160 for discharges into municipal sewer systems, nor for charging fees to recover administrative expenses related
to monitoring compliance with delegated pretreatment programs.

[Statutory Authority: Chapter 43.21A RCW. 88-12-035 (Order 88-8), § 173-223-060, filed 5/26/88, effective 7/1/88.]

WAC 173-223-070 Credits. Any public entity engaging in comprehensive monitoring programs may apply for credits against permit fees. The full amount of permit fees assessed against a public entity that has made application for credits shall not be due and payable until after the department made a determination on the application for credit. The department may establish a due date in accordance with WAC 173-223-050 for an amount equal to the fee assessment minus the requested credit. Any balance of fee charges remaining after approval or denial of a credit shall be due thirty days after the department gives notice of such approval or denial. The department may approve applications for credits that meet the following criteria:

(1) Credit shall not be granted to a facility in excess of twenty-five percent of the permit fee assessed over the five-year period of a permit;

(2) The total amount of credits granted for the five-year period beginning July 1, 1988, shall not exceed fifty thousand dollars. The total amount of credits granted for any one year shall not exceed the balance of the fifty thousand dollar maximum divided by the number of years remaining before July 1, 1993. If more than one permittee applies for credits during the same year, the department shall consider the amount of the credits applied for and the benefits derived from the comprehensive monitoring programs in distributing the credits for that year among the applicants;

(3) Credit shall not be granted for monitoring required by the terms of the applicant’s permit, nor for monitoring of effluent or the effects of effluent on the receiving water, sediment, or biota in the vicinity of the discharge, nor for monitoring that is within the scope of monitoring guidelines developed by the department for implementation through permits;

(4) In applying for an NPDES permit credit, the public entity must demonstrate that the applicant’s comprehensive monitoring procedures benefits to the general public or public agencies responsible for protection or management of the state’s waters or aquatic resources. Such benefits must extend beyond the immediate jurisdiction or responsibility of the entity making application.

[Statutory Authority: Chapter 43.21A RCW. 88-12-035 (Order 88-8), § 173-223-070, filed 5/26/88, effective 7/1/88.]

WAC 173-223-080 Transfer of ownership or control. The department shall charge fees from the permit holder on record with the department. In the event that ownership or control of a permitted facility or activity is transferred, it shall not be the responsibility of the department to transfer funds between a new and previous permit holder, and the department shall not refund fee charges prospectively in the event of a transfer. Fees paid by a previous permit holder shall be deemed to satisfy the corresponding fee payment requirements of a new permit holder. Agreements between a new and previous permit holder are not binding on the department.

[Statutory Authority: Chapter 43.21A RCW. 88-12-035 (Order 88-8), § 173-223-080, filed 5/26/88, effective 7/1/88.]

WAC 173-223-090 Administrative appeals to the director. (1) Any person aggrieved by a determination made under this chapter by the department may file a written appeal to the director no later than the due date for payment of fees. Such appeal shall state the reasons that the aggrieved person believes that the department’s determination is contrary to the requirements of RCW 90.48.600, 90.48.610, or 90.48.620, and specific actions that he/she is requesting that are consistent with those requirements. The director shall either issue a revised determination or a statement upholding the original determination. A revised determination shall be consistent with the requirements of RCW 90.48.600, 90.48.610, and 90.48.620. If the director determines that there is a substantial public interest, he/she may hold a public hearing on the appeal prior to issuing a final determination.

(2) Small businesses required to pay permit fees under the industrial facility fee categories may receive a reduction of their permit fees.

(a) To qualify for the fee reduction, a business must:

(i) Be a corporation, partnership, sole proprietorship, or other legal entity formed for the purpose of making a profit;

(ii) Be independently owned and operated from all other businesses (i.e., not a subsidiary of a parent company);

(iii) Have fifty or fewer employees; and

(iv) Have annual sales of five hundred thousand dollars or less of the goods or services produced using the wastewater-discharging process.

(b) To receive a fee reduction, the permit holder must submit an application in a manner prescribed by the department demonstrating that the conditions of (a) of this subsection have been met. The application shall bear a certification of correctness and be signed:

(i) In the case of a corporation, by a responsible corporate officer;

(ii) In the case of a partnership, by a general partner;

(iii) In the case of a sole proprietorship, by the proprietor.

(c) The department may verify the information contained in the application and, if it determines that the permit holder has made false statements in its application, may deny requests for fee reductions and revoke previously granted fee reductions.

(d) The annual permit fee for small businesses determined to be eligible shall be reduced by fifty percent.

(e) If due to special economic circumstances the fee imposed by (d) of this subsection would impose an extreme hardship on a small business, the small business may so indicate in its application for fee reduction and request a further fee reduction. The small business must provide sufficient evidence to support its claim of extreme hardship. The factors which the department may
consider in determining whether the applicant faces special economic circumstances and in setting the applicant's fee include: The applicant's annual sales, the size of its labor force, the conditions of the market which affect the applicant's ability to pass the cost of the permit fee through to its customers, and its average annual profits. In no case will the annual fee be reduced below one hundred fifty dollars.

(3) Holders of wastewater discharge permits for municipal/domestic facilities which are assigned to a fee category which imposes a fee greater than five dollars per residential equivalent per year are eligible for permit reductions.

(a) To receive a fee reduction, a permit holder must submit an application in a manner prescribed by the department certifying the number of residential equivalents that the facility serves.

(b) The application shall bear a certification of correctness and be signed:

(i) In the case of a corporation, by a responsible corporate officer;
(ii) In the case of a partnership, by a general partner;
(iii) In the case of a sole proprietorship, by the proprietor;
(iv) In the case of a municipal, state, or other public facility, by either a ranking elected official or a principal executive officer.

(c) The department may verify the information contained in the application and, if it determines that the permit holder has made false statements in its application, may deny requests for fee reductions and revoke previously granted fee reductions.

(d) The annual permit fee for a municipal/domestic facility which has been determined to be eligible shall be five dollars times the number of residential equivalents that the facility serves.

WAC 173-230-010 General. One of the basic requirements of the Wastewater Treatment Plant Operator Certification Act of 1973 (chapter 139, Laws of 1973) (chapter 70.95B RCW) is to have every operator in responsible charge of a wastewater treatment plant certified at a level equal to or higher than the classification rating of the treatment plant being operated. Certification under this act is available to all individuals who can meet the minimum qualifications for a given classification. Operating personnel not required to be certified by chapter 70.95B RCW are encouraged to become certified on a voluntary basis.

WAC 173-230-020 Definitions. (1) "Board" means the water and wastewater operators certification board of examiners established by RCW 70.95B.070.

(2) "Certificate" means the certificate of competency issued by the director stating that an individual has met the requirements for a specific classification in the wastewater treatment plant operator's certification program.

(3) "Certificate holder" means the individual to whom a certificate is issued.

(4) "CEU" means continuing education unit which is a nationally recognized unit of measurement similar to college credit. One CEU is awarded for every ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction.

(5) "College" means credits earned toward a college degree or in course work that is relevant to the operation of a wastewater treatment plant. College shall also mean CEUs. Forty-five CEUs equals forty-five quarter credits equals thirty semester credits.

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

(7) "Director" means the director of the department of ecology or the director's designee.
(8) "GED" means a General Education Development certificate issued by a recognized education institution. A GED is equivalent to a high school diploma.

(9) "Group and class" for the purpose of operator certification and wastewater treatment plant classification shall mean the same.

(10) "OIT" means operator-in-training. This is the entry level certification classification offered by the department.

(11) "Operating experience" means the routine performance of duties, on-site in a wastewater treatment plant, that affect plant performance and/or effluent quality.

(12) "Operator" means an individual who performs routine duties on-site at a wastewater treatment plant which affect plant performance and/or effluent quality.

(13) "Operator in charge of each shift" means the individual on-site at a wastewater treatment plant whose primary responsibility is to operate the wastewater treatment plant on a regularly run shift. The operator in charge of each shift shall be subordinate to the operator in responsible charge.

(14) "Operator in responsible charge" means the individual who is routinely on-site and in direct charge of the overall operation of a wastewater treatment plant.

(15) "Owner" means in the case of a town or city, the city or town acting through its chief executive officer or the lessee if operated pursuant to a lease or contract; in the case of a county, the chairman of the county legislative authority or the chairman's designee; in the case of a sewer district, board of public utilities, association, municipality or other public body, the president or chairman of the body or the president's or chairman's designee; in the case of a privately owned wastewater treatment plant, the legal owner.

(16) "Reciprocity" means the exchange of a valid out-of-state wastewater treatment plant operator's certificate achieved by passing a written examination for an equivalent level of certification without further examination.

(17) "Wastewater certification program coordinator" means an employee of the department who is appointed by the director to serve on the board and who administers the wastewater treatment plant operator certification program.

(18) "Wastewater collection system" means any system of lines, pipes, manholes, pumps, liftstations, or other facilities used to collect and transport wastewater.

(19) "Wastewater treatment plant" means a facility used to treat any liquid or waterborne waste of domestic origin or a combination of domestic, commercial or industrial origin, and which by its design requires the presence of an operator for its operation. It shall not include any facility used exclusively by a single family residence, septic tanks with subsoil absorption, industrial wastewater treatment plants, or wastewater collection systems.


WAC 173-230-030 Duties of the board. (1) Recommend to the director the classification of wastewater treatment plants when a plant handles a unique treatment process or complex waste that is not reflected in the wastewater treatment plant classification system set forth in WAC 173-230-140.

(2) Develop operator qualification standards consistent with the wastewater treatment plant classification system and examine the qualifications of applicants for certification.

(3) Assist in the development of rules and regulations; prepare, administer and evaluate examinations used to measure an operator's qualifications for certification. Recommend to the director the issuance or revocation of certificates.

(4) Encourage operating personnel other than those who are required to be certified in RCW 70.95B.030 to become certified on a voluntary basis.

(5) Maintain records of operator qualifications, certifications, and a register of certified operators.

WAC 173-230-040 Certification required. (1) After July 1, 1974, it shall be unlawful for any person, firm, corporation, municipal corporation or other governmental subdivision or agency to operate a wastewater treatment plant unless the operator designated by the owner in responsible charge of the plant holds a valid certificate of at least the same classification as that of the wastewater treatment plant being operated. When a wastewater treatment plant is operated on more than one daily shift, the individual in charge of each regularly run shift at the wastewater treatment plant being operated shall also be certified.

(2) After January 1, 1989, it shall be unlawful to operate a wastewater treatment plant on more than one daily shift as described in subsection (1) of this section unless the operator in charge of each shift, as designated by the owner, is certified at a level not less than one class lower than the class of plant being operated. The operator in charge of each shift shall be subordinate to the operator in responsible charge of the plant who is certified at a level equal to or higher than the classification of the plant being operated.

(3) When a position required to be filled by a certified wastewater treatment plant operator as described herein is vacated due to a scheduled vacation or a short-term illness, these requirements may be waived temporarily at the director's discretion.

[Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-030, filed 10/23/87. Statutory Authority: Chapter 70.95B RCW. 82-09-056 (Order DE 82-07), § 173-230-040, filed 4/16/82.]

WAC 173-230-050 Certification prerequisites. (1) Certificates shall be issued only upon application and only after payment of fees as required herein. Except as provided in WAC 173-230-050(2), certificates in appropriate classifications shall be issued to those who are eligible for examination pursuant to WAC 173-230-061 and only after successful completion of an examination as provided for in WAC 173-230-070.

(2) Certificates shall be issued without examination under the following conditions:

(a) In appropriate classifications, to an operator who on July 1, 1973, held a certificate of competency attained by examination under the voluntary certification program sponsored jointly by the department of social and health services and the Pacific Northwest Pollution Control Association.

(b) In appropriate classifications, to a person verified by the owner to have been the operator in responsible charge of a wastewater treatment plant on July 1, 1973. A certificate issued to any person under this subsection shall be known as a "provisional" certificate and shall be valid only for the plant of which he or she was the operator on July 1, 1973, and shall not be renewed if such plant thereafter has been or is significantly modified or if the operator terminates service with that plant.

(c) In appropriate classifications, to persons who fill a vacated position required by RCW 70.95B.020 to be filled by a certified operator. A certificate issued under this subsection shall be known as a "temporary" certificate and shall be valid for a period of not more than twelve months from the date of issue and shall be non-renewable. If a position is vacated by the holder of a temporary certificate issued under this subsection, no additional temporary certificate shall be issued.

(3) Certification requirements: Applicants for certification by examination or reciprocity must meet the minimum education and operating experience requirements or equivalents set forth below:

<table>
<thead>
<tr>
<th>Certification Classification</th>
<th>Education</th>
<th>Operating Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>OIT</td>
<td>High school diploma</td>
<td>3 months</td>
</tr>
<tr>
<td>Group I</td>
<td>High school diploma</td>
<td>1 year</td>
</tr>
<tr>
<td>Group II</td>
<td>High school diploma</td>
<td>3 years</td>
</tr>
<tr>
<td>Group III</td>
<td>High school diploma plus two years college</td>
<td>4 years</td>
</tr>
<tr>
<td>Group IV</td>
<td>High school diploma plus four years college</td>
<td>4 years</td>
</tr>
</tbody>
</table>

(a) Applicants for Group I certification may not substitute equivalent work experience or college for any portion of the operating experience requirement.

(b) At least half of the operating experience requirement for Class II, III, or IV certification must be gained on-site, in a wastewater treatment plant with a classification rating not less than one class lower than the class of certification desired.

(c) College claimed by an applicant for certification shall be credited toward the certification requirements only when documented on a transcript or a certificate of completion.

(4) Equivalent education

(a) A GED is equivalent to a high school diploma.

(b) One year of excess operating experience may be substituted for one year of high school or two years of grade school – no limit.

(c) Applicants for Group III and IV certification may substitute one year of excess operating experience for one year of college for up to half of the college requirement.

Note: Operating experience substituted for an education requirement may not also be applied to the operating experience requirement.

(5) Equivalent operating experience

(a) OIT applicants may substitute three CEUs or equivalent for the operating experience requirement provided the CEUs are earned upon completion of coursework in wastewater treatment plant operation.

(b) Applicants for Group II certification may substitute up to one and one-half years of college for one and one-half years of the operating experience requirement.

(c) Applicants for Group III and IV certification may substitute up to two years of excess college for two years of the operating experience requirement.

(d) Applicants may substitute work experience in the fields identified below for up to half of the operating experience requirement for Group II, III, and IV certification at a rate determined by the board:

- Experience as an environmental or operations consultant.
- Experience in an environmental or engineering branch of federal, state, county, or local government.
- Experience as a wastewater collection system operator.
Wastewater Treatment Plant 173–230–080

- Experience as a water distribution system operator and/or manager.
- Experience as a wastewater pump station operator.
- Experience as a water treatment plant operator.

The board may also consider work experience in fields such as building and equipment maintenance, boiler operation, machinist, laboratory technician, engineering, welding, or other related fields on a case-by-case basis when presented with a written description of the duties performed on the job by the applicant for certification.

Note: College substituted for an operating experience requirement cannot also be applied to the education requirement.

(6) Exemptions
In the event an applicant for Group III or IV certification cannot meet the minimum college education requirements or equivalents set forth in subsections (3), (4), and (5) of this section, the board shall consider the applicants eligibility for certification using the following substitution formula:

- After providing verification of a high school diploma or GED, Group III and IV applicants may substitute three years of excess operating experience in a wastewater treatment plant with a classification rating not less than one classification lower than the level of certification desired, for one year of college — no limit.

(7) If no examination is required, the wastewater certification program coordinator shall present the application to the board for consideration. The board shall make a recommendation to the director regarding the approval or denial of the request for certification.

(8) Group IV applications shall be submitted to the board for approval prior to scheduling for examination.

(9) If an examination is required, the wastewater certification program coordinator shall notify, schedule, and examine all applicants for certification.


WAC 173–230–070 Examination. (1) The board shall prepare written examinations to be used in determining the competency of operators.

(2) Examinations shall be held at least three times annually at places and times set by the board. These examinations shall be held on the first Monday of February, June, and October each year. In the event the exam date falls on a holiday, the examination shall be rescheduled by the wastewater certification program coordinator.

(3) All examinations shall be graded by the wastewater certification program coordinator and the applicant shall be notified of the score attained and pass or fail. Examinations shall not be returned to the applicant.

(4) An applicant who fails to pass an examination may be reexamined at the next scheduled examination with no additional application or fee.

(5) An applicant who fails to pass a second examination as provided for in WAC 173–230–070(4) must reapply for further examination as provided for in WAC 173–230–090(2). No individual will be allowed to retake the same examination more than twice consecutively.

After two consecutive examinations, one examination period must be skipped.

(6) The board shall forward its recommendations for certification of those examined to the director.


(1) Except as provided for in WAC 173–230–050 (2)(c), the term for any certificate or renewal thereof shall be from the first of January of the year of issuance until the thirty-first of December of the same year or the year designated by the department.

(2) Except as provided in WAC 173–230–050 (2)(c), all certificates shall be renewable upon presentation of evidence that the certificate holder demonstrates continued professional growth in the field. The department shall mail renewal notices to all certificate holders eligible for renewal prior to the date the certificate expires.

(3) In order to demonstrate continued professional growth in the field, each certificate holder must accomplish one of the following activities during a three-year period ending December 31, 1979, and each three-year period thereafter:

(a) Accumulate a minimum of three CEUs or college credits in coursework relevant to the field;

(b) Advance by exam to a higher level of certification in Washington's wastewater treatment plant operator's certification program. Advancement from OIT to Group I certification shall not fulfill this requirement;

(c) Achieve certification by examination in the waterworks certification program administered by the Washington department of social and health services;

(d) Achieve certification by examination in a different classification of the waterworks certification program administered by DSHS as shown below:

- Water Distribution Manager (WDM) to Water Treatment Plant Operator (WTPO)
- WTPO to WDM
- Water Distribution Specialist (WDS) to WDM or WTPO
- Cross Connection Control Specialist (CCS) to WDM or WTPO or WDS;

(e) On or after January 1, 1989, achieve certification by examination or advance by examination to a higher level in Washington's voluntary wastewater collection system operator's certification program administered by the Washington Wastewater Collection System Personnel Association. Advancement from the in-training certification classification to the Level 1 classification shall not fulfill this requirement.

(4) It is the responsibility of each certificate holder to satisfy the continued professional growth requirement on or before December 31 of the last year of the three-year period described in subsection (3) of this section. The department shall mail a written notice to each certificate holder who has not fulfilled the continued professional growth requirement. If this requirement is not satisfied, the certificate shall not be renewable. Failure to renew a certificate for any reason shall be handled as described in WAC 173–230–100.

[1988 WAC Supp—page 441]
WAC 173-230-090 Fees. (1) Except for applications for certificates under WAC 173-230-050 (2)(a), applications for certification by examination will be accepted for processing only when accompanied by a fee of twenty dollars. Applications for certification by reciprocity will be accepted for processing only when accompanied by a fee of forty dollars.

(2) Except as provided under WAC 173-230-070(4), applications for reexamination will be accepted for processing only when accompanied by an application fee of twenty dollars.

(3) In the event an application for certification is denied, the department may reimburse up to half the fee amount provided the department receives a written request for reimbursement within thirty days after the letter of denial is mailed.

(4) Applications for certificate renewals will be accepted for processing only when accompanied by a renewal fee of ten dollars for each year of renewal.

(5) All receipts hereunder shall be paid into the state general fund.

WAC 173-230-100 Suspension and revocation. (1) When a certificate is not renewed, such certificate, upon notice by the director, shall be suspended for sixty days. If renewal of the certificate is not completed during the suspension period, the director shall mail a written notice of revocation to the certificate holder's employer as last known by the department and to the certificate holder at the address last known by the department. This notice of revocation shall be sent by certified mail. If, during the revocation notice period, the certificate is not renewed, the certificate shall be revoked ten days after such notice is mailed.

(2) Certificates may also be revoked when the board so recommends to the director, upon finding:

(a) Fraud or deceit in obtaining the certificate.

(b) Gross negligence in the operation of a wastewater treatment plant.

(c) Violation of the requirements of this chapter or the statute it implements or of any lawful rule, regulation or order of the department.

(3) No revocation shall be made under subsection (2) of this section unless the operator has been notified that revocation is proposed, has been advised of the grounds therefor and has been given an opportunity to appear before the board and be heard on the matter.

(4) Whenever an individual's certificate is revoked, the individual shall not be certified again until he or she has applied for certification pursuant to WAC 173-230-061 paid the application fee, and passed the written examination for the classification of certification desired.

(5) If revocation was made pursuant to subsection (2) of this section, the operator shall not be eligible to reapply for a certificate for one year from the date the revocation became final.

WAC 173-230-110 Reciprocity. The director may, with the approval of the board, waive examinations for applicants holding valid wastewater treatment plant operators certificates or licenses issued by other states having equivalent standards as determined by the board.

(1) Applications for reciprocity will be considered for approval only when the department receives written confirmation from the certifying authority of the state or province in which the applicant is certified, that the certificate is currently valid and was earned by passing a written examination. A copy of the exam passed by the applicant must also be released for review by the board.

(2) The board shall review and compare out-of-state examinations with Washington's exams to determine at which level the exam is most equivalent.

(3) Certificates shall be issued to each reciprocity applicant who meets the minimum education and experience requirements set forth in WAC 173-230-061 and who passes a written examination comparable to Washington's exam as determined by the board and approved by the director.

WAC 173-230-140 Classification of wastewater treatment plants. Wastewater treatment plants are classified in four groups, according to the total point rating as derived from the items listed below. Assignment of points for wastewater treatment plants shall be made by the director.

(1) PLANT CLASS:

(a) Class I – 1 – 25 total points.

(b) Class II – 26 – 50 total points.

(c) Class III – 51 – 70 total points.

(d) Class IV – 71 or more total points.
### Combined Sewer Overflow Reduction Facilities

#### RATING VALUE

<table>
<thead>
<tr>
<th>(2) DESIGN FLOW</th>
<th>1 per 5 mgd, not to exceed 20 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Example: 5 mgd and less = 1 point; 5.1 to 10 mgd = 2 points, etc.)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(3) POPULATION EQUIVALENT (P.E.)</th>
<th>1 per 5,000 P.E., not to exceed 20 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE = (Flow, mgd) (BOD, mg/L)(8.34 lbs/gal) (0.2) lbs BOD/person/day</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(4) PRETREATMENT UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Manually cleaned screens</td>
</tr>
<tr>
<td>(b) Mechanically cleaned screens</td>
</tr>
<tr>
<td>(c) Grit removal</td>
</tr>
<tr>
<td>(d) Preaeration</td>
</tr>
<tr>
<td>(e) Comminutor, barminutors, grind- ers, etc.</td>
</tr>
<tr>
<td>(f) Plant pumping</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(5) PRIMARY TREATMENT UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Imhoff tanks, spirogesters, Clari-gesters, etc.</td>
</tr>
<tr>
<td>(b) Primary clarifiers</td>
</tr>
<tr>
<td>(c) Primary clarifiers utilizing settling aid chemicals</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(6) SECONDARY TREATMENT UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Trickling filter (without recircula- tion)</td>
</tr>
<tr>
<td>(b) Trickling filter (with recirculation)</td>
</tr>
<tr>
<td>(c) Activated sludge</td>
</tr>
<tr>
<td>(i) Mechanical aeration</td>
</tr>
<tr>
<td>(ii) Diffused or dispersed air</td>
</tr>
<tr>
<td>(iii) Oxidation ditch</td>
</tr>
<tr>
<td>(iv) Pure oxygen</td>
</tr>
<tr>
<td>(d) Stabilization ponds</td>
</tr>
<tr>
<td>(e) Stabilization ponds with aeration</td>
</tr>
<tr>
<td>(f) Secondary clarifiers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(7) TERTIARY TREATMENT UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Polishing pond</td>
</tr>
<tr>
<td>(b) Land disposal of effluent</td>
</tr>
<tr>
<td>(c) Chemical treatment for phosphorus removal</td>
</tr>
<tr>
<td>(d) Activated carbon beds (with carbon regeneration)</td>
</tr>
<tr>
<td>(e) Activated carbon beds (without carbon regeneration)</td>
</tr>
<tr>
<td>(f) Sand or mixed-media filters</td>
</tr>
<tr>
<td>(g) Other nutrient removal processes following secondary treatment</td>
</tr>
</tbody>
</table>

| (8) DISINFECTION | 4 |

#### RATING VALUE

<table>
<thead>
<tr>
<th>(9) SLUDGE TREATMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Sludge digesters (anaerobic)</td>
</tr>
<tr>
<td>(b) Sludge digesters (aerobic)</td>
</tr>
<tr>
<td>(c) Drying beds or evaporation la- goons</td>
</tr>
<tr>
<td>(d) Thickener clarifier</td>
</tr>
<tr>
<td>(e) Vacuum filter</td>
</tr>
<tr>
<td>(f) Centrifuge</td>
</tr>
<tr>
<td>(g) Incinerator</td>
</tr>
<tr>
<td>(h) Utilizing digester gas for other than heating purposes</td>
</tr>
</tbody>
</table>

When a wastewater treatment plant handles a complex waste or a unique treatment process that is not reflected in the classification system, the director upon recommendations of the board may establish a classification consistent with the intent of the above classification system.

[Statutory Authority: RCW 70.95B.040. 87-22-006 (Order 87-36), § 173-230-140, filed 10/21/86; 87-11-016 (Order DE 78-18), § 173-230-140, filed 10/11/78; Order 73-30, § 173-230-140, filed 11/9/73.]

### Chapter 173-245 WAC

**SUBMISSION OF PLANS AND REPORTS FOR CONSTRUCTION AND OPERATION OF COMBINED SEWER OVERFLOW REDUCTION FACILITIES**

**WAC**

173-245-010 Purpose and scope.
173-245-015 General requirements.
173-245-020 Definitions.
173-245-030 Submission of plans.
173-245-040 CSO reduction plan.
173-245-050 Plans and specifications.
173-245-055 Construction quality assurance plan.
173-245-060 Operation and maintenance manual.
173-245-070 Declaration of construction completion.
173-245-075 Form—Declaration of construction of water pollution control facilities.
173-245-080 Requirement for certified operator.
173-245-084 Ownership and operation and maintenance.
173-245-090 Schedule updates—Monitoring—Reporting.

**WAC 173-245-010 Purpose and scope.** This chapter establishes a procedure and criteria for implementing RCW 90.48.480 which requires "the greatest reasonable reduction of combined sewer overflows at the earliest possible date."

[Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-010, filed 1/27/87.]

**WAC 173-245-015 General requirements.** (1) All CSO sites shall achieve and at least maintain the greatest reasonable reduction, and neither cause violations of applicable water quality standards, nor restrictions to

[1988 WAC Supp—page 443]
the characteristic uses of the receiving water, nor accumulation of deposits which: (a) Exceed sediment criteria or standards; or (b) have an adverse biological effect.

(2) This chapter shall not negate specific CSO reduction projects, programs, and schedules which the department and a municipality have agreed upon prior to this chapter's effective date. However, the provisions of this chapter shall still apply.

[Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-015, filed 1/27/87.]

WAC 173-245-020 Definitions. As used in this chapter:

(1) "At-site treatment" means treatment and discharge of combined sewage at the CSO site.

(2) "Baseline annual CSO volume and frequency" means the annual CSO volume and frequency which is estimated to occur based upon the existing sewer system and the historical rainfall record.

(3) "Best management practices" means use of those practices which will best reduce the amount of pollution caused by nonpoint sources so that pollutant loadings in combined and storm sewer flows during rainfall events are minimized.

(4) "Combined sewage" means the mixture of sanitary sewage, infiltration, and inflow.

(5) "Combined sewer" means a sewer which has been designed to serve as a sanitary sewer and a storm sewer, and into which inflow is allowed by local ordinance.

(6) "Combined sewer overflow (CSO)" means (a) the event during which excess combined sewage flow caused by inflow is discharged from a combined sewer, rather than conveyed to the sewage treatment plant because either the capacity of the treatment plant or the combined sewer is exceeded.

(7) "CSO reduction plan" means a comprehensive plan for attaining the greatest reasonable reduction of CSO's at the earliest possible date. The requirements for a CSO reduction plan are as further described in this chapter.

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

(9) "Disinfection" means the selective destruction of disease-causing and bacterial indicator group organisms.

(10) "Domestic wastewater facilities" means any CSO treatment/control facility included under the definition of domestic wastewater facilities as defined in chapter 173-240 WAC.

(11) "In-line storage" means storage of sewage within the sewer pipes through the use of regulators and gates.

(12) "Infiltration" means the addition of ground water into a sewer through joints, the sewer material, cracks, and other defects.

(13) "Inflow" means the addition of rainfall- caused surface water drainage from roof drains, yard drains, basement drains, street catch basins, etc., into a sewer.

(14) "NPDES" means the National Pollutant Discharge Elimination System.

(15) "Off-line storage" means storage of sewage adjacent to the sewer pipe in a tank or other storage device.

(16) "Primary treatment" means any process which removes at least fifty percent of the total suspended solids from the waste stream, and discharges less than 0.3 ml/l/hr. of settleable solids.

(17) "Sanitary sewer" means a sewer which is designed to convey sanitary sewage and infiltration.

(18) "Sanitary sewage" means the mixture of domestic, commercial, and industrial wastewaters.

(19) "Secondary treatment" means any process which achieves the requirements of 40 CFR Part 133 as supplemented by state regulation and guidance.

(20) "Storm sewer" means a sewer which is designed to convey surface water drainage caused by rainfall.

(21) "Storm sewer/sanitary sewer separation" means construction of new storm sewers or new sanitary sewers so that sanitary sewage and surface drainage are conveyed in different sewers.

(22) "The greatest reasonable reduction" means control of each CSO such that an average of one untreated discharge may occur per year.

[Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-020, filed 1/27/87.]

WAC 173-245-030 Submission of plans. Municipalities shall:

(1) Obtain the approval of the department for CSO reduction plans by January 1, 1988. This deadline may be extended by the department, when that authority is granted.

(2) Submit plans to the department at least sixty days prior to the time approval is desired.

(3) Incorporate CSO reduction plans into their respective general sewer plans and into plans for new or upgraded sewage treatment facilities.

[Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-030, filed 1/27/87.]

WAC 173-245-040 CSO reduction plan. (1) The CSO reduction plan shall be sufficiently complete so that plans and specifications can be developed from it for projects which may proceed into design within two years of plan submittal. Sufficient detail of any remaining projects shall be provided such that detailed engineering reports can be prepared in the future.

(2) CSO reduction plans shall include the following information together with any other relevant data as requested by the department:

(a) Documentation of CSO activity. Municipalities shall complete a field assessment and mathematical modeling study to establish each CSO's location, baseline annual frequency, and baseline annual volume; to characterize each discharge; and to estimate historical impact by:

(i) Flow monitoring and sampling CSO's. Monitoring and sampling at one or more CSO sites in a group which are in close proximity to one another shall be sufficient if the municipality can establish a consistent hydraulic and pollutant correlation between/among the group of CSO sites. Sampling may not be required for CSO sites which serve residential basins; and
Combined Sewer Overflow Reduction Facilities 173–245–050

(ii) Developing a rainfall/stormwater runoff/CSO model to simulate each CSO site's activity; and

(iii) Verifying the model's accuracy with data collected under (a)(i) of this subsection; and

(iv) In circumstances where an historical impact may be discernible, observing and sampling the receiving water sediments adjacent to each CSO site or group of sites to establish the presence and extent of any bottom deposits; and

(v) If the sewer service area upstream of a CSO site includes sanitary sewer sources other than domestic sewage, samples of the sediment deposits shall receive heavy metal analysis and organic pollutant screening. Pending review of results of these analyses, the department may require additional pollutant analyses. If two or more CSO sites serve the same industrial/commercial sources, sediment sampling adjacent to one representative CSO site may suffice.

(b) Analysis of control/treatment alternatives. Treatment/control alternatives, to achieve the greatest reasonable reduction at each CSO site, which shall receive consideration include but are not limited to:

(i) Use of best management practices, sewer use ordinances, pretreatment programs, and sewer maintenance programs to reduce pollutants, reduce infiltration, and delay and reduce inflow; and

(ii) In–line and off–line storage with at least primary treatment and disinfection at the secondary sewage treatment facility which is served by the combined sewer; or

(iii) Increased sewer capacity to the secondary sewage treatment facility which shall provide at least primary treatment and disinfection; or

(iv) At–site treatment equal to at least primary treatment, and adequately offshore submerged discharge. At site treatment may include a disinfection requirement at CSO sites which are near or impact water supply intakes, potentially harvestable shellfish areas, and primary contact recreation areas; or

(v) Storm sewer/sanitary sewer separation.

(c) Analysis of selected treatment/control projects. Municipalities shall do an assessment of the treatment/control project or combination of projects proposed for each CSO site. The assessment shall include:

(i) An estimation of the water quality and sediment impacts of any proposed treated discharge using existing background receiving water quality data, and estimated discharge quality and quantity. The department may require a similar analysis for proposed storm sewer outfalls for basins which drain industrial and/or commercial areas; and

(ii) An estimation of the selected projects' impacts on the quality of effluent from and operation of a municipality's secondary sewage treatment facility. During wet weather flow conditions, a municipality shall maximize the rate and volume of flows transported to its secondary sewage treatment facility for treatment. However, such flows shall not cause the treatment facility to exceed the pollutant concentration limits in its NPDES permit; and

(iii) The estimated construction and operation and maintenance costs of the selected projects; and

(iv) The general locations, descriptions, basic design data, sizing calculations, and schematic drawings of the selected projects and descriptions of operation to demonstrate technical feasibility; and

(v) An evaluation of the practicality and benefits of phased implementation; and

(vi) A statement regarding compliance with the State Environmental Policy Act (SEPA).

(d) Priority ranking. Each municipality shall propose a ranking of its selected treatment/control projects. The rankings shall be developed considering the following criteria:

(i) Highest priority shall be given to reduction of CSO's which discharge near water supply intakes, public primary contact recreation areas, and potentially harvestable shellfish areas;

(ii) A cost–effectiveness analysis of the proposed projects. This can include a determination of the monetary cost per annual mass pollutant reduction, per annual volume reduction, and/or per annual frequency reduction achieved by each project;

(iii) Documented, probable, and potential environmental impacts of the existing CSO discharges.

(e) Municipalities shall propose a schedule for achieving "the greatest reasonable reduction of combined sewer overflows at the earliest possible date." (RCW 90.48.480.) If the agreed upon schedule exceeds five years, municipalities shall propose an initial five–year program of progress towards achieving the greatest reasonable reduction. Factors which municipalities and the department shall use to determine compliance schedules shall include but not be limited to:

(i) Total cost of compliance;

(ii) Economic capability of the municipality;

(iii) Other recent and concurrent expenditures for improving water quality; and

(iv) The severity of existing and potential environmental and beneficial use impacts.


WAC 173–245–050 Plans and specifications. (1) The plans and specifications for a domestic wastewater facility are the detailed construction documents by which the owner or his contractor bid and construct the facility. The content and format of the plans and specifications shall be as stated in the state of Washington, "criteria for sewage works design," and shall include a listing of the facility design criteria and a plan for interim operation of facilities during construction.

(2) Plans and specifications for sewer line extensions shall include, as a separate report, an analysis of the existing collection and treatment systems ability to transport and treat additional flow and loading.

(3) Two copies of the plans and specifications shall be submitted to the department for approval prior to start of construction, excepting as waived under WAC 173–240–030(5). (See also, WAC 173–240–070.)

WAC 173-245-055 Construction quality assurance plan. (1) Prior to construction a detailed plan must be submitted to the department showing how adequate and competent construction inspection will be provided.

(2) The construction quality assurance plan shall include:

(a) Construction schedule with a summary of planned construction activities, their sequence, interrelationships, durations, and terminations.
(b) Description of the construction management organization, management procedures, lines of communication, and responsibility.
(c) Description of anticipated quality control testing including type of test, frequency, and who will perform the tests.
(d) Description of the change order process including who will initiate change orders, as well as who will review, negotiate, and approve change orders.
(e) Description of the technical records handling methodology including where plans and specifications, as–built drawings, field orders, and change orders will be kept.
(f) Description of construction inspection program including inspection responsibility, anticipated inspection frequency, deficiency resolution, and inspector qualifications. (See also, WAC 173-240-075.)

[Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-055, filed 1/27/87.]

WAC 173-245-060 Operation and maintenance manual. (1) The proposed method of operation and maintenance of the domestic wastewater facility shall be stated in the engineering report or plans and specifications and approved by the department. The statement shall be a discussion of who will own, operate, and maintain the facility and what the staffing and testing requirements are. The owner shall follow the approved method of operation after the facility is constructed, unless changes have been approved by the department.

(2) In those cases where the facility includes mechanical components, a detailed operation and maintenance manual shall be prepared prior to completion of construction. The purpose of the manual is to present technical guidance and regulatory requirements to the operator to enhance operation under both normal and emergency conditions. Two copies of the manual shall be submitted to the department for approval prior to completion of construction.

(3) In order to assure proper operation during construction and timely review and approval of the final operation and maintenance manual, a draft manual shall be submitted in the early stages of the construction of a facility. In addition, manufacturer’s information on equipment must be available to the plant operator prior to unit start–up.

(4) The operation and maintenance manual shall include the following list of topics. For those projects funded by the environmental protection agency the manual shall also follow the requirements of the EPA publication, Considerations for Preparation of Operation and Maintenance Manuals.

(a) The assignment of managerial and operational responsibilities to include plant classification and classification of required operators.
(b) A description of plant type, flow pattern, operation, and efficiency expected.
(c) The principal design criteria.
(d) A process description of each plant unit, including function, relationship to other plant units, and schematic diagrams.
(e) A discussion of the detailed operation of each unit and description of various controls, recommended settings, fail–safe features, etc.
(f) A discussion of how the treatment facilities are to be operated during anticipated maintenance procedures, and under less than design loading conditions, if applicable, such as initial loading on a system designed for substantial growth.
(g) A section on laboratory procedures including sampling techniques, monitoring requirements, and sample analysis.
(h) Recordkeeping procedures and sample forms to be used.
(i) A maintenance schedule incorporating manufacturer’s recommendations, preventative maintenance and housekeeping schedules, and special tools and equipment usage.
(j) A section on safety.
(k) A section stating the spare parts inventory, address of local suppliers, equipment warranties, and appropriate equipment catalogues.
(l) Emergency plans and procedures.
(5) In those cases where the facility does not include mechanical components, an operation and maintenance manual, which may be less detailed than that described in subsection (4) of this section, shall be submitted to the department for approval prior to completion of construction. The manual shall fully describe the treatment and disposal system and outline routine maintenance procedures needed for proper operation of the system. (See also, WAC 173-240-080.)

[Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-060, filed 1/27/87.]

WAC 173-245-070 Declaration of construction completion. (1) Within thirty days following acceptance by the owner of the construction or modification of a domestic wastewater facility, the professional engineer in responsible charge of inspection of the project shall submit to the department (a) one complete set of record drawings or as–builds (b) a declaration stating the facilities were constructed in accordance with the provisions of the construction quality assurance plan and without significant change from the department approved plans and specifications.

(2) The declaration will be furnished by the department and will be the same form as WAC 173–245–075, declaration of construction of water pollution control facilities. The submission of the declaration is not necessary for sewer line extensions where the local government entity has received approval of a general
Combined Sewer Overflow Reduction Facilities

WAC 173-245-075 Form—Declaration of construction of water pollution control facilities.

DECLARATION OF CONSTRUCTION OF WATER POLLUTION CONTROL FACILITIES

Instructions:
A. Upon completion, and prior to the use of any project or portions thereof, a professional engineer shall complete and sign this form, declaring that the project was constructed in accordance with the provisions of the construction quality assurance plan and with the plans and specifications and major change orders approved by the department of ecology.

B. If a project is being completed in phased construction, a map shall be attached showing that portion of the project to which the declaration applies. A declaration of construction must be submitted for each phase of a project as it is completed. Additional declaration forms are available upon request from the department of ecology offices listed below.

NAME AND BRIEF DESCRIPTION OF PROJECT: ________________________________

NAME OF OWNER _______ DOE PROJECT NO. ____________

ADDRESS _______________ DATE PROJECT OR PHASE COMPLETED ____________

CITY ___________ STATE _____ ZIP _______

DOE PLAN AND SPECIFICATION APPROVAL DATE ____________

I hereby declare that I am the project engineer of the above identified project and that said project was reviewed and observed by me or my authorized agent in accordance with the provisions of the construction quality assurance plan. I further declare that said project was to the best of my knowledge and information constructed and completed in accordance with the plans and specification and major change orders approved by the department of ecology and as shown on the owner’s "as-built" plans.

Signature or Professional Engineer

DATE _______________

SEAL OF ENGINEER

Please return completed form to the department of ecology office checked below.

[Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-075, filed 1/27/87.]

WAC 173-245-080 Requirement for certified operator. Each owner of a domestic wastewater treatment facility is required by chapter 70.95B RCW to have an operator, certified by the state, in responsible charge of the day to day operation of the facility. This requirement does not apply to a septic tank utilizing subsurface disposal. The certification procedures are set forth in chapter 173-230 WAC. (See also, WAC 173-240-100.)

[Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34), § 173-245-080, filed 1/27/87.]

WAC 173-245-084 Ownership and operation and maintenance. (1) Domestic sewage facilities will not be approved unless ownership and responsibility for operation and maintenance is by a public entity except as provided in subsections (2) and (3) of this section. If a waste discharge permit is required it must be issued to the public entity. Nothing herein precludes a public entity from contracting operation and maintenance of domestic sewage facilities.

(2) Ownership by nonpublic entities may be approved if the department determines such ownership is in the public interest; provided there is an enforceable contract, approved by the department, between the nonpublic entity and a public entity with an approved sewer general plan which will assure immediate assumption of the system under the following conditions:

(a) Treatment efficiency is unsatisfactory either as a result of plant capacity or physical operation; or

(b) If such assumption is necessary for the implementation of a general sewer plan.

(3) The following domestic wastewater facilities would not require public entity ownership, operation, and maintenance:

(a) Those facilities existing or approved for construction as of the effective date of this section, until such time as the facility is expanded to accommodate additional development.

(b) Those facilities that serve a single nonresidential, industrial, or commercial establishment. Commercial/industrial complexes serving multiple owners or tenants and multiple residential dwelling facilities such as mobile home parks, apartments, and condominiums are not

[1988 WAC Supp—page 447]
considered commercial establishments for the purpose of
this section. (See also, WAC 173-240-104.)

[WAC 173-245-090 Schedule updates—Monitoring—Reporting. (1) By the anniversary date of its sewage
 treatment plant NPDES permit, in conjunction with
 its annual assessment for prevention of facilities over­
 loading where applicable, a municipality shall submit an
 annual CSO report to the department for review and
 approval which:
 (a) Details the past year's frequency and volume of
 combined sewage discharged from each CSO site, or
 group of CSO sites in close proximity. Field monitor­
ing shall be necessary to estimate these parameters. The re­
 port shall indicate whether a CSO site or group of sites
 has increased over the baseline annual condition. If any
 increase has occurred, the municipality shall propose a
 project and schedule to reduce that CSO site or group of
 sites to or below its baseline condition;
 (i) When a CSO site has been reduced to an average
 of one overflow per year through use of storage or sepa­
 ration, the department may consider reducing the moni­
toring requirement to frequency verification;
 (ii) If the selected CSO control project is at-site
 treatment and discharge, the department may issue a
 modification to the applicable sewage treatment plant
 permit or issue a separate NPDES permit for that dis­
 charge. The permit or permit modification shall include
 effluent limits, flow capacity limits, and reporting re­
 quirements. The total treated and untreated annual dis­
 charge from an at-site treatment plant shall not increase
 above the baseline annual;
 (b) Explains the previous year's CSO reduction ac­
 complishments; and
 (c) Lists the projects planned for the next year.
 (2) In conjunction with its application for renewal of
 its applicable NPDES permit, the municipality shall
 submit an amendment to its CSO reduction plan. The am­
 endment shall include:
 (a) An assessment of the effectiveness of the CSO re­
 duction plan to date; and
 (b) A reevaluation of the CSO sites' project priority
 ranking; and
 (c) A list of projects to be accomplished in the next
 five years based upon priorities and estimated revenues.
 The department of ecology may incorporate such sched­
 ule into an administrative order or the applicable NP­
 DES permit.
 [Statutory Authority: RCW 90.48.035. 87-04-020 (Order DE 86-34),
 § 173-245-084, filed 1/27/87.]

Chapter 173-303 WAC
DANGEROUS WASTE REGULATIONS

WAC
173-303-017 Recycling processes involving solid waste.
173-303-040 Definitions.
173-303-045 References to EPA's hazardous waste and permit
 regulations.

[1988 WAC Supp—page 448]
WAC 173-303-017 Recycling processes involving solid waste. (1) The purpose of this section is to identify those materials that are and are not solid wastes when recycled. Certain materials, as described in subsection (2) of this section, would not typically be considered to involve waste management and are exempt from the requirements of this chapter. All recycling processes not exempted by subsection (2) of this section are subject to the recycling requirements of WAC 173-303-120.

(2) General categories of materials that are not solid waste when recycled.

(a) Except as provided in subsection (3) of this section, materials are not solid wastes when they can be shown to be recycled by being:

(i) Used or reused as ingredients in an industrial process to make a product provided the materials are not being reclaimed; or

(ii) Used or reused as effective substitutes for commercial products; or

(iii) Returned to the original process from which they are generated without first being reclaimed. The material must be returned as a substitute for raw material feedstock, and the process must use raw materials as principal feedstocks.

(b) Except as provided in subsection (3) of this section, the department has determined that the following materials when used as described are not solid wastes:

(i) Pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process;

(ii) Spent pickle liquor which is reused in wastewater treatment at a facility holding a national pollutant discharge elimination system (NPDES) permit, or which is being accumulated, stored, or treated before such reuse;

(iii) Spent sulfuric acid used to produce virgin sulfuric acid.

(3) The following materials are solid wastes, even if the recycling involves use, reuse, or return to the original process (as described in subsection (2)(a) of this section):

(a) Materials used in a manner constituting disposal, or used to produce products that are applied to the land; or

(b) Materials burned for energy recovery, used to produce a fuel, or contained in fuels; or

(c) Materials accumulated speculatively as defined in WAC 173-303-016 (5)(d)(ii); or

(d) Materials listed in WAC 173-303-016(6); or

(e) Any materials that the department determines are being accumulated, used, reused or handled in a manner that poses a threat to public health or the environment.

(4) Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation. Respondents in actions to enforce regulations implementing chapter 70.105 RCW who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.

(5) Variances from classification as a solid waste.

(a) In accordance with the standards and criteria in (b) of this subsection and the procedures in subsection (7) of this section, the department may determine on a case-by-case basis that the following recycled materials are not solid wastes:

(i) Materials that are accumulated speculatively without sufficient amounts being recycled (as defined in WAC 173-303-016 (5)(d)(ii));

(ii) Materials that are reclaimed and then reused within the original primary production process in which they were generated;

(iii) Materials that have been reclaimed but must be reclaimed further before the materials are completely recovered;

(iv) State-only dangerous materials (not regulated as hazardous wastes (defined in WAC 173-303-040(39)) by EPA) which serve as an effective substitute for a commercial product or raw material.

(b) Standards and criteria for variances from classification as a solid waste.

(i) The department may grant requests for a variance from classifying as a solid waste those materials that are accumulated speculatively without sufficient amounts being recycled if the applicant demonstrates that sufficient amounts of the material will be recycled or transferred for recycling in the following year. If a variance is granted, it is valid only for the following year, but can be renewed, on an annual basis, by filing a new application. The department's decision will be based on the following standards and criteria:

(A) The manner in which the material is expected to be recycled, when the material is expected to be recycled, and whether this expected disposition is likely to occur (for example, because of past practice, market factors, the nature of the material, or contractual arrangements for recycling);

(B) The reason that the applicant has accumulated the material for one or more years without recycling seventy-five percent of the volume accumulated at the beginning of the year;

(C) The quantity of material already accumulated and the quantity expected to be generated and accumulated before the material is recycled;
(D) The extent to which the material is handled to minimize loss;
(E) Other relevant factors.
(ii) The department may grant requests for a variance from classifying as a solid waste those materials that are reclaimed and then reused as feedstock within the original primary production process in which the materials were generated if the reclamation operation is an essential part of the production process. This determination will be based on the following criteria:
(A) How economically viable the production process would be if it were to use virgin materials, rather than reclaimed materials;
(B) The prevalence of the practice on an industry-wide basis;
(C) The extent to which the material is handled before reclamation to minimize loss;
(D) The time periods between generating the material and its reclamation, and between reclamation and return to the original primary production process;
(E) The location of the reclamation operation in relation to the production process;
(F) Whether the reclaimed material is used for the purpose for which it was originally produced when it is returned to the original process, and whether it is returned to the process in substantially its original form;
(G) Whether the person who generates the material also reclaims it;
(H) Other relevant factors.
(iii) The department may grant requests for a variance from classifying as a solid waste those materials that have been reclaimed but must be reclaimed further before recovery is completed if, after initial reclamation, the resulting material is commodity-like (even though it is not yet a commercial product, and has to be reclaimed further). This determination will be based on the following factors:
(A) The degree of processing the material has undergone and the degree of further processing that is required;
(B) The value of the material after it has been reclaimed;
(C) The degree to which the reclaimed material is like an analogous raw material;
(D) The extent to which an end market for the reclaimed material is guaranteed;
(E) The extent to which the reclaimed material is handled to minimize loss;
(F) Other relevant factors.
(iv) The department may grant requests for a variance from classifying as a solid waste those materials that serve as an effective substitute for a commercial product or raw material, when such material is not regulated as hazardous waste (defined in WAC 173–303–040(39)) by EPA, if the materials are recycled in a manner such that they more closely resemble products or raw materials rather than wastes. This determination will be based on the following factors:
(A) The effectiveness of the material for the claimed use;
(B) The degree to which the material is like an analogous raw material or product;
(C) The extent to which the material is handled to minimize loss or escape to the environment;
(D) The extent to which an end market for the reclaimed material is guaranteed;
(E) The time period between generating the material and its recycling;
(F) Other factors as appropriate.
(6) Variance to be classified as a boiler.
In accordance with the standards and criteria in WAC 173–303–040(8) (definition of "boiler"), and the procedures in subsection (7) of this section the department may determine on a case-by-case basis that certain enclosed devices using controlled flame combustion are boilers, even though they do not otherwise meet the definition of boiler contained in WAC 173–303–040(8), after considering the following criteria:
(a) The extent to which the unit has provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and
(b) The extent to which the combustion chamber and energy recovery equipment are of integral design; and
(c) The efficiency of energy recovery, calculated in terms of the recovered energy compared with the thermal value of the fuel; and
(d) The extent to which exported energy is utilized; and
(e) The extent to which the device is in common and customary use as a "boiler" functioning primarily to produce steam, heated fluids, or heated gases; and
(f) Other factors, as appropriate.
(7) Procedures for variances from classification as a solid waste or to be classified as a boiler.
The department will use the following procedures in evaluating applications for variances from classification as a solid waste or applications to classify particular enclosed flame combustion devices as boilers:
(a) The applicant must apply to the department. The application must address the relevant criteria contained in subsections (5)(b) or (6) of this section.
(b) The department will evaluate the application and issue a draft public notice tentatively granting or denying the application. Notification of this tentative decision will be provided by newspaper advertisement and radio broadcast in the locality where the recycler is located. The department will accept comment on the tentative decision for thirty days, and may also hold a public hearing upon request or at its discretion. The department will issue a final decision after receipt of comments and after the hearing (if any), and this decision may not be appealed to the department.


WAC 173–303–040 Definitions. When used in this regulation, the following terms have the meanings given below.
(1) "Active portion" means that portion of a facility which is not a closed portion (subsection (11) of this section), and where dangerous waste recycling, reuse, reclamation, transfer, treatment, storage or disposal operations are being or have been conducted after:

(a) The effective date of the waste's designation by 40 CFR Part 261; and

(b) March 10, 1982, for wastes designated only by this chapter and not designated by 40 CFR Part 261. (See also "closed portion" and "inactive portion."

(2) "Acutely hazardous waste" means dangerous waste sources (listed in WAC 173–303–9904) F020, F021, F022, F023, F026, or F027, and discarded chemical products (listed in WAC 173–303–9903) that are identified with a dangerous waste number beginning with a "P" or that show an "X" or "A" in the reason for designation column.

(3) "Aquatic LC₅₀" (same as TL₉₆) means a concentration in mg/L (ppm) which kills in 96 hours half of a group of ten or more of a medium sensitivity warm water species of fish such as Lepomis macrochirus (bluegill) or Pimephales promelas (flathead minnow), or cold water species such as salmonidiae, when using the testing method described in WAC 173–303–110.

(4) "Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of ground water to wells or springs.

(5) "Asbestos containing waste material" means any waste that contains more than one percent asbestos by weight and that can be crumbled, pulverized, or reduced to powder when dry, by hand pressure.

(6) "Batch" means any waste which is generated less frequently than once a month.

(7) "Berm" means the shoulder of a dike.

(8) "Boiler" means an enclosed device using controlled flame combustion and having the following characteristics:

(a)(i) The unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

(ii) The unit's combustion chamber and primary energy recovery section(s) must be of integral design. To be of integral design, the combustion chamber and the primary energy recovery section(s) (such as waterwalls and superheaters) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design: Process heaters (units that transfer energy directly to a process stream), and fluidized bed combustion units; and

(iii) While in operation, the unit must maintain a thermal energy recovery efficiency of at least sixty percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

(iv) The unit must export and utilize at least seventy-five percent of the recovered energy, calculated on an annual basis. In this calculation, no credit shall be given for recovered heat used internally in the same unit. (Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps); or

(b) The unit is one which the department has determined, on a case-by-case basis, to be a boiler, after considering the standards in WAC 173–303–017(6).

(9) "By-product" means a material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a co-product that is produced for the general public's use and is ordinarily used in the form it is produced by the process.

(10) "Carcinogenic" means a material known to contain an IARC positive or suspected, human or animal carcinogen.

(11) "Closed portion" means that portion of a facility which an owner or operator has closed, in accordance with the approved facility closure plan and all applicable closure requirements.

(12) "Closure" means the requirements placed upon all TSD facilities to ensure that all such facilities are closed in an acceptable manner (see also "post-closure").

(13) "Compliance procedure" shall mean any proceedings instituted pursuant to the Hazardous Waste Disposal Act as amended in 1980 and 1983, and chapter 70.105A RCW, or regulations issued under authority of state law, which seeks to require compliance, or which is in the nature of an enforcement action or an action to cure a violation. A compliance procedure includes a notice of intention to terminate a permit pursuant to WAC 173–303–830(5), or an application in the state superior court for appropriate relief under the Hazardous Waste Management Act. A compliance procedure is considered to be pending from the time a notice of violation or of intent to terminate a permit is issued or judicial proceedings are begun, until the department notifies the owner or operator in writing that the violation has been corrected or that the procedure has been withdrawn or discontinued.

(14) "Constituent" or "dangerous waste constituent" means a chemically distinct component of a dangerous waste stream or mixture.

(15) "Container" means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.

(16) "Contingency plan" means a document setting out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion, or release of dangerous waste or hazardous waste constituents which could threaten the public health or environment.

(17) "Contract" means the written agreement signed by the department and the state operator.

(18) "Dangerous wastes" means those solid wastes designated in WAC 173–303–070 through 173–303–103...
as dangerous or extremely hazardous waste. As used in this chapter, the words "dangerous waste" will refer to the full universe of wastes regulated by this chapter (including dangerous and extremely hazardous waste), while the abbreviation "DW" will refer to that part of the regulated universe which is dangerous only, and not extremely hazardous. (See also "extremely hazardous waste" and "hazardous waste" definitions.)

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

(20) "Dermal LD<sub>50</sub>" means the single dosage in milligrams per kilogram (mg/kg) body weight which, when dermally (skin) applied for 24 hours, within 14 days kills half of a group of ten rabbits each weighing between 2.0 and 3.0 kilograms.

(21) "Designated facility" means the facility designated by the generator on the manifest to receive a dangerous waste shipment and which is authorized pursuant to this chapter or RCRA to recycle or manage dangerous waste.

(22) "Dike" means an embankment or ridge of natural or man-made materials used to prevent the movement of liquids, sludges, solids, or other substances.

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

(24) "Discharge" or "dangerous waste discharge" means the accidental or intentional release of hazardous substances, dangerous waste or dangerous waste constituents such that the substance, waste or a waste constituent may enter or be emitted into the environment. Release includes, but is not limited to, the actions of: Spilling, leaking, pumping, pouring, emitting, dumping, emptying, depositing, placing, or injecting.

(25) "Disposal" means the discharging, discarding, or abandoning of dangerous wastes or the treatment, decontamination, or recycling of such wastes once they have been discarded or abandoned. This includes the discharge of any dangerous wastes into or on any land, air, or water.

(26) "Draft permit" means a document prepared under WAC 173-303-840 indicating the department's tentative decision to issue or deny, modify, revoke and reissue, or terminate a permit. A notice of intent to terminate or deny a permit are types of draft permits. A denial of a request for modification, revocation and reissuance, or termination as discussed in WAC 173-303-830 is not a draft permit.

(27) "Elementary neutralization unit" means a device which:

(a) Is used for neutralizing wastes which are dangerous wastes only because they exhibit the corrosivity characteristics defined in WAC 173-303-090 or are listed in WAC 173-303-081, or in 173-303-082 only for this reason; and

(b) Meets the definition of tank, container, transport vehicle, or vessel.

(28) "EPA/state identification number" or "EPA/state ID#" means the number assigned by EPA or by the department of ecology to each generator, transporter, and TSD facility.

(29) "Extremely hazardous waste" means those dangerous wastes designated in WAC 173-303-070 through 173-303-103 as extremely hazardous. The abbreviation "EHW" will be used in this chapter to refer to those dangerous wastes which are extremely hazardous. (See also "dangerous waste" and "hazardous waste" definitions.)

(30) "Facility" means all contiguous land, and structures, other appurtenances, and improvements on the land used for recycling, reusing, reclaiming, transferring, storing, treating, or disposing of dangerous waste. Unless otherwise specified in this chapter, the terms "facility," "treatment, storage, disposal facility," "TSD facility," "dangerous waste facility" or "waste management facility" shall be used interchangeably.

(31) "Food chain crops" means tobacco, crops grown for human consumption, and crops grown to feed animals whose products are consumed by humans.

(32) "Freeboard" means the vertical distance between the top of a tank or surface impoundment dike, and the surface of the waste contained therein.

(33) "Fugitive emissions" means the emission of contaminants from sources other than the control system exit point. Material handling, storage piles, doors, windows and vents are typical sources of fugitive emissions.

(34) "Generator" means any person, by site, whose act or process produces dangerous waste or whose act first causes a dangerous waste to become subject to regulation.

(35) "Genetic properties" means those properties which cause or significantly contribute to mutagenic, teratogenic, or carcinogenic effects in man or wildlife.

(36) "Ground water" means water which fills voids below the land surface and in the earth's crust.

(37) "Halogenated hydrocarbons" (HH) means any organic compounds which, as part of their composition, include one or more atoms of fluorine, chlorine, bromine, iodine, or astatine. The requirements of this chapter apply to only those halogenated hydrocarbons which can be obtained using the testing method described in WAC 173-303-110, testing methods, and which are persistent dangerous wastes.

(38) "Hazardous substances" means any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical or biological properties described in WAC 173-303-090, 173-303-101, 173-303-102, or 173-303-103.

(39) "Hazardous wastes" means those solid wastes designated by 40 CFR Part 261, and regulated as hazardous waste by the United States EPA. This term will never be abbreviated in this chapter to avoid confusion with the abbreviations "DW" and "EHW." (See also "dangerous waste" and "extremely hazardous waste" definitions.)

(40) "Inactive portion" means that portion of a facility which has not been recycled, treated, stored, or disposed dangerous waste after:

(a) The effective date of the waste's designation, for wastes designated under 40 CFR Part 261; and

(b) March 10, 1982, for wastes designated only by this chapter and not designated by 40 CFR Part 261.
(41) "Incinerator" means any enclosed device using controlled flame combustion that neither meets the criteria for classification as a boiler nor is listed as an industrial furnace.

(42) "Incompatible waste" means a dangerous waste which is unsuitable for placement in a particular device or facility because it may corrode or decay the containment materials, or is unsuitable for mixing with another waste or material because the mixture might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, fumes, mists, or gases, or flammable fumes or gases.

(43) "Industrial-furnace" means any of the following enclosed devices that are integral components of manufacturing processes and that use controlled flame devices to accomplish recovery of materials or energy; cement kilns, lime kilns, aggregate kilns, phosphate kilns, blast furnaces, smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, reverberatory furnaces, sintering machines, roasters and foundry furnaces), titanium dioxide chloride process oxidation reactors, coke ovens, methane reforming furnaces, combustion devices used in the recovery of sulfur values from spent sulfurous acid, and pulping liquor recovery furnaces. The department may decide to add devices to this list on the basis of one or more of the following factors:
   (a) The device is designed and used primarily to accomplish recovery of material products;
   (b) The device burns or reduces secondary materials as ingredients in an industrial process to make a material product;
   (c) The device burns or reduces secondary materials as effective substitutes for raw materials in processes using raw materials as principal feedstocks;
   (d) The device burns or reduces raw materials to make a material product;
   (e) The device is in common industrial use to produce a material product; and
   (f) Other factors, as appropriate.

(44) "Infectious waste" means organisms or materials listed in WAC 173-303-083, infectious dangerous wastes.

(45) "Inhalation LC₅₀" means a concentration in milligrams of substance per liter of air which, when administered to the respiratory tract for 4 hours, kills within 14 days half of a group of ten rats each weighing between 200 and 300 grams.

(46) "Inner liner" means a continuous layer of material placed inside a tank or container which protects the construction materials of the tank or container from the waste or reagents used to treat the waste.

(47) "Interim status permit" means a temporary permit given to TSD facilities which qualify under WAC 173-303-805.

(48) "Landfill" means a disposal facility, or part of a facility, where dangerous waste is placed in or on land and which is not a land treatment facility, a surface impoundment, or an injection well.

(49) "Land treatment" means the practice of applying dangerous waste onto or incorporating dangerous waste into the soil surface so that it will degrade or decompose. If the waste will remain after the facility is closed, this practice is disposal.

(50) "Leachate" means any liquid, including any components suspended in the liquid, that has percolated through or drained from dangerous waste.

(51) "Legal defense costs" means any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.

(52) "Liner" means a continuous layer of man-made or natural materials which restrict the escape of dangerous waste, dangerous waste constituents, or leachate through the sides, bottom, or berms of a surface impoundment, waste pile, or landfill.

(53) "Major facility" means a facility or activity classified by the department as major.

(54) "Manifest" means the shipping document, prepared in accordance with the requirements of WAC 173-303-180, which is used to identify the quantity, composition, origin, routing, and destination of a dangerous waste while it is being transported to a point of transfer, disposal, treatment, or storage.

(55) (Reserved.)

(56) "NIOSH registry" means the registry of toxic effects of chemical substances which is published by the National Institute for Occupational Safety and Health.

(57) "Nonsudden accident" or "nonsudden accidental occurrence" means an unforeseen and unexpected occurrence which takes place over time and involves continuous or repeated exposure.

(58) "Occurrence" means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage which the owner or operator neither expected nor intended to occur.

(59) "On-site" means the same, geographically contiguous, or bordering property. Travel between two properties divided by a public right of way, and owned, operated, or controlled by the same person, shall be considered on-site travel if: (a) The travel crosses the right of way at a perpendicular intersection; or, (b) the right of way is controlled by the property owner and is inaccessible to the public.

(60) "Operator" means the person responsible for the overall operation of a facility. (See also "state operator.")

(61) "Oral LD₅₀" means the single dosage in milligrams per kilogram (mg/kg) body weight, when orally administered, which, within 14 days, kills half a group of ten or more white rats each weighing between 200 and 300 grams.

(62) "Permit" means an authorization which allows a person to perform dangerous waste transfer, storage, treatment, or disposal operations, and which typically will include specific conditions for such facility operations. Permits must be issued by one of the following:
   (a) The department, pursuant to this chapter;
   (b) United States EPA, pursuant to 40 CFR Part 270; or
   (c) Another state authorized by EPA, pursuant to 40 CFR Part 271.

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(63) "Permit–by–rule" means a provision of this chapter stating that a facility or activity is deemed to have a dangerous waste permit if it meets the requirements of the provision.

(64) "Persistence" means the quality of a material which retains more than half of its initial activity after one year (365 days) in either a dark anaerobic or dark aerobic environment at ambient conditions.

(65) "Person" means any person, firm, association, county, public or municipal or private corporation, agency, or other entity whatsoever.

(66) "Pesticide" means but is not limited to: Any substance or mixture of substances intended to prevent, destroy, control, repel, or mitigate any insect, rodent, nematode, mollusk, fungus, weed, and any other form of plant or animal life, or virus (except virus on or in living man or other animal) which is normally considered to be a pest or which the department of agriculture may declare to be a pest; any substance or mixture of substances intended to be used as a plant regulator, defoliant, or desiccant; any substance or mixture of substances intended to be used as spray adjuvant; and, any other substance intended for such use as may be named by the department of agriculture by regulation. Herbicides, fungicides, insecticides, and rodenticides are pesticides for the purposes of this chapter.

(67) "Pile" means any noncontainerized accumulation of solid, nonflowing dangerous waste that is used for treatment or storage.

(68) "Point source" means any confined and discrete conveyance from which pollutants are or may be discharged. This term includes, but is not limited to, pipes, ditches, channels, tunnels, wells, cracks, containers, rolling stock, concentrated animal feeding operations, or watercraft, but does not include return flows from irrigated agriculture.

(69) "Polycyclic aromatic hydrocarbons" (PAH) means those hydrocarbon molecules composed of two or more benzene rings. For the purposes of this chapter, the PAH of concern for designation are only those PAH with more than three rings and less than seven rings.

(70) "Post–closure" means the requirements placed upon disposal facilities (e.g., landfills, impoundments closed as disposal facilities, etc.) after closure to ensure their environmental safety for a number of years after closure. (See also "closure.")

(71) "Publicly owned treatment works" or "POTW" means any device or system, owned by the state or a municipality, which is used in the treatment, recycling, or reclamation of municipal sewage or liquid industrial wastes. This term includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW.

(72) "Reclaim" means to process a material in order to recover useable products, or to regenerate the material. Reclamation is the process of reclaiming.

(73) "Recover" means extract a useable material from a solid or dangerous waste through a physical, chemical, biological, or thermal process. Recovery is the process of recovering.

(74) "Recycle" means to use, reuse, or reclaim a material.

(75) "Regulated unit" means any new or existing surface impoundment, landfill, land treatment area or waste pile that receives any dangerous waste after:

(a) January 26, 1983 for wastes regulated by 40 CFR Part 261;

(b) October 31, 1984 for wastes designated only by this chapter and not regulated by 40 CFR Part 261; or

(c) The date six months after a waste is newly identified by amendments to 40 CFR Part 261 or this chapter which cause the waste to be regulated.

(76) "Representative sample" means a sample which can be expected to exhibit the average properties of the sample source.

(77) "Reuse or use" means to employ a material either:

(a) As an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one process used as feedstock in another process). However, a material will not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or

(b) In a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorous precipitant and sludge conditioner in wastewater treatment).

(78) "Run–off" means any rainwater, leachate, or other liquid which drains over land from any part of a facility.

(79) "Run–on" means any rainwater, leachate, or other liquid which drains over land onto any part of a facility.

(80) "Schedule of compliance" means a schedule of remedial measures in a permit including an enforceable sequence of interim requirements leading to compliance with this chapter.

(81) "Sludge" means any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility. This term does not include the treated effluent from a wastewater treatment plant.

(82) "Scrap metal" means bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e.g., radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled.

(83) "Spent material" means any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing.

(84) "State operator" means the person responsible for the overall operation of the state's extremely hazardous waste facility on the Hanford Reservation.

(85) "Storage" means the holding of dangerous waste for a temporary period. "Accumulation" of dangerous waste, by the generator on the site of generation, is not storage as long as the generator complies with the applicable requirements of WAC 173–303–200 and 173–303–201.
(86) "Sudden accident" means an unforeseen and unexpected occurrence which is not continuous or repeated in nature.

(87) "Surface impoundment" means a facility or part of a facility which is a natural topographic depression, man–made excavation, or diked area formed primarily of earthen materials (although it may be lined with man–made materials), and which is designed to hold an accumulation of liquid dangerous wastes or dangerous wastes containing free liquids. The term includes holding, storage, settling, and aeration pits, ponds, or lagoons, but does not include injection wells.

(88) "Tank" means a stationary device designed to contain an accumulation of dangerous waste, and which is constructed primarily of nonearthen materials to provide structural support.

(89) "Thermal treatment" means the use of a device which uses primarily elevated temperatures to treat a dangerous waste.

(90) "TLM96" means the same as "Aquatic LC50."

(91) "Totally enclosed treatment facility" means a facility for treating dangerous waste which is directly connected to a production process and which prevents the release of dangerous waste or dangerous waste constituents into the environment during treatment.

(92) "Toxic" means having the properties to cause or to significantly contribute to death, injury, or illness of man or wildlife.

(93) "Transfer facility" or "collection facility" means a facility at which dangerous waste shipments are collected, consolidated, and stored for more than ten days before transfer to a storage, treatment, or disposal facility.

(94) "Transportation" means the movement of dangerous waste by air, rail, highway, or water.

(95) "Transporter" means a person engaged in the off–site transportation of dangerous waste.

(96) "Travel time" means the period of time necessary for a dangerous waste constituent released to the soil (either by accident or intent) to enter any on–site or off–site aquifer or water supply system.

(97) "Treatment" means the physical, chemical, or biological processing of dangerous waste to make such wastes nondangerous or less dangerous, safer for transport, amenable for energy or material resource recovery, amenable for storage, or reduced in volume.

(98) "Treatment zone" means a soil area of the unsaturated zone of a land treatment unit within which dangerous wastes are degraded, transformed or immobilized.

(99) "Triple rinsing" means the cleaning of containers in accordance with the requirements of WAC 173–303–160 (2)(b), containers.

(100) "Underground injection" means the subsurface emplacement of fluids through a bored, drilled, or driven well, or through a dug well, where the depth of the dug well is greater than the largest surface dimension.

(101) "Unsaturated zone" means the zone between the land surface and the water table.

(102) "Uppermost aquifer" means the geological formation nearest the natural ground surface that is capable of yielding ground water to wells or springs. It includes lower aquifers that are hydraulically interconnected with this aquifer within the facility property boundary.

(103) "Water or rail (bulk shipment)" means the bulk transportation of dangerous waste which is loaded or carried on board a vessel or railcar without containers or labels.

(104) "Waste water treatment unit" means a device which:

(a) Is part of a waste water treatment facility which is subject to regulation under either:
   (i) Section 402 or section 307(b) of the Federal Clean Water Act; or
   (ii) Chapter 90.48 RCW, State Water Pollution Control Act, provided that any dangerous waste treated at the facility is designated only by this chapter 173–303 WAC and is not regulated as hazardous waste under 40 CFR Part 261; and

(b) Handles dangerous waste as defined in WAC 173–303–070 through 173–303–103 in either of the following manner:
   (i) Receives and treats or stores an influent dangerous waste water; or
   (ii) Generates and accumulates or treats or stores a dangerous waste water treatment sludge; and

(c) Meets the definition of tank in WAC 173–303–040.

(105) "Existing TSD facility" means a facility which was in operation or for which construction commenced on or before November 19, 1980, for wastes designated by 40 CFR Part 261, or August 9, 1982, for wastes designated only by this chapter and not designated by 40 CFR Part 261. A facility has commenced construction if the owner or operator has obtained permits and approvals necessary under federal, state and local statutes, regulations and ordinances and either:

(a) A continuous on–site, physical construction program has begun; or

(b) The owner or operator has entered into contractual obligation, which cannot be cancelled or modified without substantial loss, for physical construction of the facility to be completed within a reasonable time.

(106) "New TSD facility" means a facility which began operation or for which construction commenced after November 19, 1980, for wastes designated by 40 CFR Part 261, or August 9, 1982, for wastes designated only by this chapter and not designated by 40 CFR Part 261.

(107) "Special waste" means any dangerous waste that is solid only (nonliquid, nonaqueous, nongaseous), that is not a regulated hazardous waste under 40 CFR Part 261, and that is designated as only DW in WAC 173–303–090, 173–303–101, 173–303–102, or 173–303–103. Any solid waste that is EHW or that is regulated by the United States EPA as hazardous waste cannot be a special waste.
Applicable closure requirements are no longer conducted at the facility unless subject to compliance with all applicable closure requirements so that hazardous waste management units at the facility in accordance with WAC 173-303-200.

The initial receipt of dangerous waste at the facility until the department receives certification of final closure. The provisions in WAC 173-303-200. Partial closure means the closure of a dangerous waste management unit in accordance with the applicable closure requirements of WAC 173-303-400 and 173-303-600 through 173-303-670 at a facility that contains other active dangerous waste management units. For example, partial closure may include the closure of a tank (including its associated piping and underlying containment systems), landfill cell, surface impoundment, waste pile, or other dangerous waste management unit, while other units of the same facility continue to operate.

Dangerous waste management unit is a contiguous area of land on or in which dangerous waste is placed, or the largest area in which there is a significant likelihood of mixing dangerous waste constituents in the same area. Examples of dangerous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and its associated piping and underlying containment system and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed.

Terms used in this chapter which have not been defined in this section shall have either the same meaning as set forth in Title 40 CFR Parts 260, 264, 270, and 124 or else shall have their standard, technical meaning.

As used in this chapter, words in the masculine gender also include the feminine and neuter genders, words in the singular include the plural, and words in the plural include the singular.

WAC 173-303-045 References to EPA's hazardous waste and permit regulations. Any references in this chapter to any parts, subparts, or sections from EPA's hazardous waste regulations, including 40 CFR Parts 260 to 270 and Part 124, shall be in reference to those rules as they existed on July 11, 1986, with the exception of rules adopted by EPA pursuant to the Hazardous and Solid Waste Amendments of 1984 (HSWA), Public Law 98-616, amending RCRA. Copies of the appropriate referenced federal requirements are available upon request from the department.

WAC 173-303-060 Notification and identification numbers. (1) Any person who generates, transports, offers for transport, or transfers a dangerous waste, or who owns or operates a dangerous waste TSD facility shall have a current EPA/state identification number (EPA/state ID#). Any person who offers a dangerous waste to a transporter or to a dangerous waste TSD facility which does not have an EPA/state ID#, or whose EPA/state ID# has been cancelled or withdrawn, shall be in violation of this regulation.

(2) Every person who must have an EPA/state ID#, and who has not already received his ID#, must notify the department by obtaining and completing a Washington state notification of dangerous waste activities, Form 2, and submitting the completed form to the department. Any person already assigned an EPA/state ID# must submit a revised notification Form 2 to the department prior to any changes to his company's name, mailing address, ownership, physical location, or type of dangerous waste activity. Any change in location will require the issuance of a new EPA/state ID#. An EPA/state ID# may not be used at new company locations. Notification of dangerous waste activities, Form 2 and instructions for its completion may be obtained by contacting the department.

(3) Any person with an EPA/state ID# may request that his ID# be withdrawn if he will no longer be handling dangerous waste at the site the ID# has been assigned to. Any person whose ID# has been withdrawn must notify the department before he uses the ID# at any later date. Notification must be in writing, except in the case of emergencies (e.g., fires, spills, etc.) such notification may be provided by telephone first, and followed within one week by a written notification. Withdrawal will only be granted when all applicable requirements of this chapter and chapter 173-305 WAC have been met.

(4) Any person with an EPA/state ID# may request that his ID# be cancelled if he will no longer occupy the site. Notification must be in writing. An EPA/state ID# shall be considered cancelled only after issuance of written confirmation by the department and when all applicable requirements of this chapter and chapter 173-305 WAC have been met.

(5) Any person with a current EPA/state ID# must submit an annual report as required by WAC 173-303-070(8), 173-303-220, and 173-303-390. Any person that has withdrawn or cancelled their ID# and received confirmation from the department must submit an annual report for the calendar year in which their request was approved.

[Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-045, filed 4/18/91. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW, 85-05-023 (Order DE 85-10), § 173-303-045, filed 2/10/82.]
WAC 173-303-070 Designation of dangerous waste.

(1) Purpose and applicability.

(a) This section describes the procedures for determining whether or not a solid waste is DW or EHW.

(b) The procedures in this section are applicable to any person who generates a solid waste (including recyclable materials) that is not exempted or excluded by this chapter or by the department. Any person who must determine whether or not his solid waste is designated must follow the procedures set forth in subsection (3) of this section. Any person who determines by these procedures that his waste is designated DW or EHW shall be subject to all applicable requirements of this chapter.

(2)(a) Once a material has been determined to be a dangerous waste, then any solid waste generated from the recycling, treatment, storage, or disposal of that material is also designated a dangerous waste. A person shall check each section against the following sections, and in the following order:

(i) It does not exhibit any of the characteristics of WAC 173-303-090; and

(ii) It was a listed waste under WAC 173-303-080 through 173-303-083 has been exempted pursuant to WAC 173-303-910(3); or

(iii) If originally designated only through WAC 173-303-084 or 173-303-101 through 173-303-103, does not exhibit any of the criteria of WAC 173-303-101 through 173-303-103.

Such solid waste shall include but not be limited to any sludge, spill residue, ash emission control dust, leachate, or precipitation run-off. Precipitation run-off will not be considered a dangerous waste if it can be shown that the run-off has not been contaminated with the dangerous waste, or that the run-off is adequately addressed under existing state laws (e.g. chapter 90.48 RCW), or that the run-off does not exhibit any of the criteria or characteristics described in WAC 173-303-100.

(b) Materials that are reclaimed from solid wastes and that are used beneficially (as provided in WAC 173-303-016 and 173-303-017) are not solid wastes and hence are not dangerous wastes under this section unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.

(3) Designation procedures.

(a) To determine whether or not his waste is designated a person shall check his waste against the following sections, and in the following order:


(b) In addition to the designation procedures specified in (a) of this subsection, a person may choose or may be required under subsection (4) of this section to check his waste against the following sections, and in the following order:


(c) A person shall check each section, in the order set forth, until he determines that his waste is designated. Once his waste is designated through the lists or characteristics, he need not determine any other designations for his waste, except as required by subsection (4) or (5) of this section. For the purposes of designating through the criteria, if a person determines that his waste is designated DW, then he must assure that it is not also EHW by checking it against the remaining sections. If the designation procedures identify a waste as both EHW and DW (e.g., a waste may be DW for corrosivity and EHW for EP toxicity), the waste must be designated EHW. If a person has checked his waste against each section that he is required by this section to check and his waste is not designated, then his waste is not subject to the requirements of chapter 173-303 WAC.

Any person who wishes to seek an exemption for a waste which has been designated DW or EHW shall comply with the requirements of WAC 173-303-072.

(4) Criteria designation required. Notwithstanding any other provisions of this chapter, the department may require any person to determine whether or not his waste is designated under the dangerous waste criteria, WAC 173-303-100 through 173-303-103, if the department has reason to believe that his waste would be designated DW or EHW by the dangerous waste criteria, or if the department has reason to believe that his waste is designated improperly (e.g., the waste has been designated DW but should actually be designated EHW by the criteria). If a person, pursuant to the requirements of this subsection, determines that his waste is a dangerous waste or that its designation must be changed, then he shall be subject to the applicable requirements of this chapter 173-303 WAC. The department shall base a requirement to designate a waste by the dangerous waste criteria on evidence that includes, but is not limited to:

(a) Test information indicating that the person's waste may be DW or EHW;

(b) Evidence that the person's waste is very similar to another persons' already designated DW or EHW;

(c) Evidence that the persons' waste has historically been a DW or EHW; or

(d) Evidence or information about a person's manufacturing materials or processes which indicate that his wastes may be DW or EHW.

(5) Special knowledge. If a generator has designated his waste under the dangerous waste lists, WAC 173-303-080 through 173-303-084, and has knowledge that his waste also exhibits any of the dangerous waste characteristics, WAC 173-303-090, or that his waste also meets any of the dangerous waste criteria, WAC 173-303-101 through 173-303-103, or both, then he shall also designate his waste in accordance with those dangerous waste characteristics, or criteria, or both.
(6) Dangerous waste numbers. When a person is reporting or keeping records on a dangerous waste, he shall use all the dangerous waste numbers which he knows are assignable to his waste from the dangerous waste lists, characteristics, or criteria. For example, if his waste is ignitable and contains extremely hazardous concentrations of halogenated hydrocarbons, he shall use the dangerous waste numbers of D001 and WP01. This shall not be construed as requiring a person to designate his waste beyond those designation requirements set forth in subsections (2), (3), (4), and (5) of this section.

(7) Quantity exclusion limits; aggregated waste quantities.

(a) Quantity exclusion limits. In each of the designation sections describing the lists, characteristics, and criteria, quantity exclusion limits (QEL) are identified. The QEL are used to distinguish when a dangerous waste is only subject to the small quantity generator provisions, and when a dangerous waste is fully subject to the requirements of this chapter. Any solid waste which is not excluded or exempted and which is listed by or exhibits the characteristics or criteria of this chapter is a dangerous waste. Small quantity generators who produce dangerous waste below the QEL are subject to certain requirements described in subsection (8) of this section.

(b) Aggregated waste quantities. A person may be generating, accumulating, or storing more than one kind of dangerous waste identified by this chapter. In such cases, the person must consider the aggregate quantity of his wastes when determining whether or not his waste amounts exceed the specific quantity exclusion limits (QEL). Waste quantities must be aggregated for all wastes with common QEL's. For the purposes of this subsection, when aggregating waste quantities, a person shall include in his calculation dangerous wastes produced by on-site treatment or recycling of dangerous wastes and dangerous wastes being accumulated or stored. For example, if a person generates, accumulates, or stores 300 pounds of an ignitable waste and 300 pounds of a persistent waste, then both wastes are regulated because their aggregate waste quantity (600 pounds) exceeds their common QEL of 400 pounds. On the other hand, if a person generates, accumulates, or stores one pound of an EHW discarded chemical product and 300 pounds of a corrosive waste, their quantities would not be aggregated because they do not share a common QEL (2.2 pounds and 400 pounds, respectively QEL's). Additional guidance on aggregating waste quantities is available from the department.

(c) The following are categories of waste that are excluded from the quantity determination and need not be aggregated as required by (b) of this subsection when calculating total waste quantities.

(i) Dangerous waste that is recycled and that is excluded from regulation under WAC 173-303-120 (2)(a), (3)(d) or (e) is not included in the quantity determinations of this section and is not subject to any requirements of this section.

(ii) Spent materials that are generated, reclaimed, and subsequently reused on-site, so long as such spent materials have been counted once.

(8) Small quantity generators.

(a) A person is a small quantity generator and is subject to the requirements of this subsection if his waste is designated under subsection (3) of this section, and the quantity of waste that he generates, accumulates, or stores (or the aggregated quantity if he generates more than one kind of waste) does not exceed the quantity exclusion limit for such waste (or wastes). If a person generates, accumulates, or stores any dangerous wastes that exceed the QEL, then all dangerous waste generated, accumulated, or stored by that person is subject to the requirements of this chapter. For example, if a person generates four pounds of an EHW discarded chemical product (QEL is 2.2 pounds) and 200 pounds of an ignitable waste (QEL is 220 pounds), then both wastes are fully regulated, and the person is not a small quantity generator for either waste. A small quantity generator may accumulate such listed or characteristic waste on-site, however when the quantity (or aggregate quantity) on-site at any time exceeds the quantity exclusion limit for such waste (or wastes) he will not be a small quantity generator and will be subject to all applicable requirements of this chapter. A small quantity generator who generates, accumulates, or stores waste in excess of the quantity exclusion limit and becomes subject to the full requirements of this chapter cannot again be a small quantity generator until after all dangerous waste on-site at the time he became fully regulated have been removed, treated, or disposed.

(b) A small quantity generator will not be subject to the requirements of this chapter if he:

(i) Complies with subsections (1), (2), (3), and (4) of this section; and

(ii) Either treats or disposes of his dangerous waste in an on-site facility, or ensures delivery to an off-site facility, either of which is:

(A) Permitted (including permit-by-rule, interim status, or final status) under WAC 173-303-800 through 173-303-840;

(B) Authorized to manage dangerous waste by another state with a hazardous waste program approved under 40 CFR Part 271, or by EPA under 40 CFR Part 270;

(C) Permitted to manage municipal or industrial solid waste in accordance with state or local regulations, or in accordance with another state's solid waste laws if the waste is sent out of state; or

(D) A facility that beneficially uses or reuses, or legitimately recycles or reclaims his dangerous waste, or that treats his waste prior to such recycling activities; and

(iii) Submits an annual report in accordance with WAC 173-303-220 if he has obtained an EPA/state identification number pursuant to WAC 173-303-060.

[Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-070, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-070, filed 6/3/86; 84-14-031 (Order DE 84-22), § 173-303-070, filed 6/27/84. Statutory Authority: RCW 70.95.260 and
WAC 173-303-071 Excluded categories of waste.
(1) Purpose. Certain categories of waste have been excluded from the requirements of chapter 173-303 WAC, except for WAC 173-303-050, because they are not hazardous waste, are regulated under state and federal programs, or are recycled in ways which do not threaten public health or the environment. WAC 173-303-071 describes these excluded categories of waste.

(2) Excluding wastes. Any persons who generate a common class of wastes and who seek to categorically exclude such class of wastes from the requirements of this chapter shall comply with the applicable requirements of WAC 173-303-072. No waste class will be excluded if any of the wastes in the class are regulated as hazardous waste under 40 CFR Part 261.

(3) Exclusions. The following categories of waste are excluded from the requirements of chapter 173-303 WAC, except for WAC 173-303-050:
(a) Domestic sewage, and any mixture of domestic sewage and other wastes that pass through a sewer system to a publicly-owned treatment works (POTW) for treatment. "Domestic sewage" means untreated sanitary wastes that pass through a sewer system. This exclusion does not apply to the generation, treatment, recycling, or other management of dangerous wastes prior to discharge into the sanitary sewage system;
(b) Industrial wastewater discharges that are point-source discharges subject to regulation under Section 402 of the Clean Water Act. This exclusion does not apply to the collection, storage, or treatment of industrial wastewater discharges; or
(c) Household wastes, including household waste that has been collected, transported, stored, or disposed. Wastes which are residues from or are generated by the management of household wastes (e.g., leachate, ash from burning of refuse-derived fuel) are not excluded by this provision. "Household wastes" means any waste material (including garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas);
(d) Agricultural crops and animal manures which are returned to the soil as fertilizers;
(e) Asphatic materials designated only for the presence of PAHs by WAC 173-303-084(6) or 173-303-102. For the purposes of this exclusion, asphatic materials means materials intended and used for structural and construction purposes (e.g., roads, dikes, paving) which are produced from mixtures of oil and sand, gravel, ash or similar substances;
(f) Roofing tars and shingles, except that these wastes are not excluded if mixed with wastes listed in WAC 173-303-081 or 173-303-082, or if they exhibit any of the characteristics specified in WAC 173-303-090;
(g) Waste wood or wood products treated with preservatives if the waste is generated by persons who utilize the treated wood or wood products for these materials' intended end use;
(h) Irrigation return flows;
(i) Materials subjected to in-situ mining techniques which are not removed from the ground during extraction;
(j) Mining overburden returned to the mining site;
(k) Polychlorinated biphenyl (PCB) wastes.
(i) PCB wastes whose disposal is regulated by EPA under 40 CFR 761.60;
(ii) Wastes that would be designated as dangerous waste under this chapter solely because they are listed as W001 under WAC 173-303-9904 when, using EPA's PCB testing method 600/4-81-045, the waste can be shown to contain less than one part per million (ppm) PCB or when, using ASTM method D 4059-86, the waste can be shown to contain less than two parts per million (ppm) PCB;
(iii) Wastes that would be designated as dangerous waste under this chapter solely because they are listed as W001 under WAC 173-303-9904 when such wastes are:
(A) Stored in a manner equivalent to the requirements of 40 CFR 761.65; and
(B) Within one year of removal from service, disposed of either in a incinerator that complies with 40 CFR 761.70, in a chemical waste landfill that complies with 40 CFR 761.75, in a high efficiency boiler that complies with 40 CFR 761.60 (a)(2)(iii) or (a)(3)(iii), or in a facility otherwise approved in accordance with 40 CFR 761.60(e);
(l) Samples.
(i) Except as provided in (l)(ii) of this subsection, a sample of solid waste or a sample of water, soil, or air, which is collected for the sole purpose of testing to determine its characteristics or composition, is not subject to any requirements of this chapter, when:
(A) The sample is being transported to a lab for testing or being transported to the sample collector after testing; or
(B) The sample is being stored by the sample collector before transport, by the laboratory before testing, or by the laboratory after testing prior to return to the sample collector; or
(C) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action).
(ii) In order to qualify for the exemption in (l)(i)(A) of this subsection, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:
(A) Comply with United States Department of Transportation (DOT), United States Postal Service (USPS), or any other applicable shipping requirements; or
(B) Comply with the following requirements if the sample collector determines that DOT or USPS, or other shipping requirements do not apply:
I) Assure that the following information accompanies the sample:
   (aa) The sample collector's name, mailing address, and telephone number;
   (bb) The laboratory's name, mailing address, and telephone number;
   (cc) The quantity of the sample;
   (dd) The date of shipment;
   (ee) A description of the sample; and
II) Package the sample so that it does not leak, spill, or vaporize from its packaging.
(iii) This exemption does not apply if the laboratory determines that the waste is dangerous but the laboratory is no longer meeting any of the conditions stated in (I)(i) of this subsection;
(m) Asbestos wastes or asbestos containing wastes which would be designated only as respiratory carcinogens by WAC 173-303-084 or 173-303-103, and any other inorganic wastes which are designated only under WAC 173-303-084 or 173-303-103 because they are respiratory carcinogens, if these wastes are managed in compliance with or in a manner equivalent to the asbestos management procedures of 40 CFR Part 61;
(n) Dangerous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated nonwaste-treatment-manufacturing unit until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the dangerous waste remains in the unit more than ninety days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials;
(o) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332), except that these wastes are not excluded if they exhibit one or more of the dangerous waste criteria (WAC 173-303-100 through 173-303-103) or characteristics (WAC 173-303-090);
(p) Wastes from burning any of the materials exempted from regulation by WAC 173-303-120 (2)(a)(v), (vi), (vii), (viii), or (ix);
(q) As of January 1, 1987, secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process provided:
(i) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;
(ii) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators);
(iii) The secondary materials are never accumulated in such tanks for over twelve months without being reclaimed;
(iv) The reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal; and
(v) The generator ensures that any residues (e.g., sludges, filters, etc.) produced from the collection, reclamation, and reuse of the secondary materials are delivered to a dangerous waste treatment, storage, or disposal facility or legitimate recycler. The generator must be able to provide documentation of such delivery. If the generator can demonstrate that the residues do not exhibit any of the dangerous waste characteristics (WAC 173-303-090) and criteria (WAC 173-303-100 through 173-303-103), then he is exempt from the requirements of this condition (v).

[Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-071, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-071, filed 6/3/86; 85-09-042 (Order DE-85-02), § 173-303-071, filed 4/15/85; 84-09-088 (Order DE 83-36), § 173-303-071, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-071, filed 2/10/82.]

WAC 173-303-081 Discarded chemical products.
(1) A waste shall be designated as a dangerous waste if it is handled in any of the manners described in (e) of this subsection, and if it is a residue from the management of:
   (a) A commercial chemical product or manufacturing chemical intermediate which has the generic name listed in the discarded chemical products list, WAC 173-303-9903;
   (b) An off-specification commercial chemical product or manufacturing chemical intermediate which if it had met specifications would have the generic name listed in the discarded chemical products list, WAC 173-303-9903;
   (c) Any containers or inner liners that have been used to hold any commercial chemical product or manufacturing chemical intermediate that has, or any off-specification commercial chemical product or manufacturing chemical intermediate which if it had met specifications would have, the generic name listed on the acutely dangerous chemical products list of WAC 173-303-9903, unless the containers or inner liners are empty and have been triple rinsed as described in WAC 173-303-160(2);
   (d) Any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill of a commercial chemical product or manufacturing chemical intermediate which has, or of an off-specification commercial chemical product or manufacturing chemical intermediate which if it had met specifications would have, the generic name listed in the discarded chemical products list, WAC 173-303-9903;
   (e) The materials or items described in (a), (b), (e), and (d) of this subsection are dangerous wastes when they are:
      (i) Discarded or intended to be discarded as described in WAC 173-303-016 (3)(b)(i);
      (ii) Burned for purposes of energy recovery in lieu of their original intended use;
      (iii) Used to produce fuels in lieu of their original intended use;
      (iv) Applied to the land in lieu of their original intended use; or
(v) Contained in products that are applied to the land in lieu of their original intended use.

(2) Quantity exclusion limits:

(a) A person with a waste or wastes (including residues from the management of wastes) identified in subsection (1) of this section, shall be a dangerous waste generator (and may not be considered a small quantity generator as provided in WAC 173-303-070(8)) if the amount of his waste exceeds the following quantity exclusion limits:

(i) For chemicals designated on the acutely dangerous chemical products list of WAC 173-303-9903 – 2.2 lbs. (1.0 kg) per month or per batch. Such wastes are designated EHW;

(ii) For chemicals and for residues from the cleanup of spills involving chemicals designated on the moderately dangerous chemical products list of WAC 173-303-9903 – 220 lbs. (100 kg) per month or per batch. Such wastes are designated DW;

(iii) For containers or inner liners which held any chemical designated on the acutely dangerous chemical products list of WAC 173-303-9903 – 22 lbs. (10 kg) of residue remaining in the containers or inner liners per month or per batch unless the containers or inner liners meet the definition of empty and have been triple rinsed as described in WAC 173-303-160(2);

(iv) For residues, contaminated soil, water, or other debris from the cleanup of a spill of any chemical designated on the acutely dangerous chemical products list of WAC 173-303-9903 – 220 lbs. (100 kg) per month or per batch. Such wastes are designated EHW.

(b) A person's total monthly waste quantity shall be the sum of all his wastes which share a common quantity exclusion limit (e.g., the total quantity of all EHW discarded chemical products, the total quantity of all residues contaminated by EHW discarded chemical products, etc.) which were generated during a month or a batch operation at each specific waste generation site.

(3) Dangerous waste numbers and mixtures. A waste which has been designated as a discarded chemical product dangerous waste shall be assigned the dangerous waste number or numbers listed in WAC 173-303-9903 according to the generic chemical or chemicals which caused the waste to be designated. If a person mixes a solid waste with a waste that would be designated as a discarded chemical product under this section, then the entire mixture shall be designated. The mixture designation shall be the same as the designation for the discarded chemical product which was mixed with the solid waste. For example, a mixture containing 2.2 lbs. (1 kg) of Aldrin (dangerous waste number P004; EHW designation) and 22 lbs. (10 kg) of a solid waste, would be designated as an EHW, and would have the dangerous waste number P004.

(4) For the purposes of this chapter, the term "acutely hazardous waste" shall include discarded chemical products (listed in WAC 173-303-9903) that are identified with a dangerous waste number beginning with a "P" or that show an "X" or "A" in the reason for designation column.

WAC 173-303-082 Dangerous waste sources. (1) The dangerous waste sources list appears in WAC 173-303-9904. Any waste which is listed or which is a residue from the management of a waste listed on the dangerous waste sources list shall be designated a dangerous waste, and shall be identified as DW, except that WAC 173-303-9904 includes several footnotes describing circumstances under which certain dangerous waste sources should be designated EHW rather than DW.

(2) Quantity exclusion limit. A person whose waste is listed in WAC 173-303-9904 (including residues from the management of such wastes) shall be a dangerous waste generator (and may not be considered a small quantity generator as provided in WAC 173-303-070(8)) if the amount of his waste exceeds the following quantity exclusion limits:

(a) 2.2 lbs. (1 kg) per month or per batch for wastes listed with the dangerous waste numbers F020, F021, F022, F023, F026, or F027. For the purposes of this chapter, the term "acutely hazardous waste" shall include dangerous waste sources F020, F021, F022, F023, F026, and F027;

(b) 220 lbs. (100 kg) per month or per batch for any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water of a waste listed in (a) of this subsection; or

(c) 220 lbs. (100 kg) per month or per batch for all other wastes.

(3) Care should be taken in the proper designation of these wastes and of mixtures of these wastes and solid wastes. If a person mixes a solid waste with a waste that would be designated as a dangerous waste source under this section, then the entire mixture shall be designated as a dangerous waste source. The mixture shall have the same designation (DW or EHW), and shall have the same dangerous waste number as the dangerous waste source which was mixed with the solid waste.

(4) For the purposes of this section, any dangerous waste source listed in WAC 173-303-9904 which lists more than one chemical compound must be designated as a dangerous waste if it contains any one or any combination of the listed chemical compounds. For example, a spent nonhalogenated solvent containing both xylene and acetone must be designated as dangerous waste source F003.

WAC 173-303-084 Dangerous waste mixtures. (1) Purpose. It is the purpose of this section to describe the
means for designating a waste mixture containing dangerous wastes which are not listed in WAC 173–303–081 through 173–303–083.

(2) References. The National Institute for Occupational Safety and Health's (NIOSH) Registry of Toxic Effects of Chemical Substances (Registery) is adopted by reference. The table in the United States EPA's regulations 40 CFR Table 302.4 (Spill Table) is adopted by reference.

(3) Waste mixture defined. For the purposes of this section, a waste mixture shall be any waste about which some or all of its constituents and concentrations are known, and which has not been designated as:

(a) A discarded chemical product under WAC 173–303–081;
(b) A dangerous waste source under WAC 173–303–082;
(c) An infectious dangerous waste under WAC 173–303–083; or
(d) A dangerous waste that has been designated by the criteria of WAC 173–303–101 through 173–303–103.

(4) A person who has a waste mixture shall use data which is available to him, and, when such data is inadequate for the purposes of this section, shall refer to the NIOSH Registry and/or to the EPA Spill Table to determine:

(a) Toxicity data or category for each known constituent in his waste;
(b) Whether or not each known constituent of his waste is a halogenated hydrocarbon or a polycyclic aromatic hydrocarbon with greater than three rings and less than seven rings; and,
(c) Whether or not each known constituent of his waste is an International Agency for Research on Cancer (IARC) human or animal, positive or suspected carcinogen.

(5) Toxicity.

(a) If a person has toxic constituents in his waste, he shall determine the toxic category for each known toxic constituent. The toxic category for each constituent may be determined directly from EPA'S Spill Table, or by obtaining data from the NIOSH Registry and checking this data against the toxic category table, below. If data is available for more than one of the four toxicity criteria (aquatic, oral, inhalation, or dermal), then the data of severest toxicity shall be used, and the most acutely toxic category shall be assigned to the constituent. If toxicity data for a constituent cannot be found in EPA'S Spill Table, NIOSH Registry, or other source reasonably available to a person, then he need not determine the toxic category for that constituent.

**TOXIC CATEGORY TABLE**

<table>
<thead>
<tr>
<th>Category</th>
<th>TLm96 (Fish) or Aquatic (Fish) LC90(ppm)</th>
<th>Oral (Rat) (mg/kg)</th>
<th>Inhalation (Rat) (mg/L)</th>
<th>Dermal (Rabbit) (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>-1 - 1</td>
<td>-5 - 5</td>
<td>-0.02 - 0.02</td>
<td>2 - 20</td>
</tr>
<tr>
<td>B</td>
<td>1 - 10</td>
<td>5 - 50</td>
<td>0.2 - 2</td>
<td>20 - 200</td>
</tr>
<tr>
<td>C</td>
<td>10 - 100</td>
<td>50 - 500</td>
<td>2 - 200</td>
<td>200 - 2000</td>
</tr>
<tr>
<td>D</td>
<td>100 - 1000</td>
<td>5000 - 5000</td>
<td>2000 - 20000</td>
<td>10000 - 100000</td>
</tr>
</tbody>
</table>

(b) A person whose waste mixture contains one or more toxic constituents shall determine the equivalent concentration for his waste from the following formula:

\[
\text{Equivalent Concentration(%) } = \Sigma X\% + \Sigma A\% + \Sigma B\% + \Sigma C\% + \Sigma D\%
\]

where \(X, A, B, C,\) or \(D\) % is the sum of all the concentration percentages for a particular toxic category.

Example 1. A person's waste mixture contains: Aldrin (X Category) – .01%, Dieldrin (B Category) – 1%; Benzene (C Category) – 4%; Phenol (C Category) – 2%; Cyclohexane (C Category) – 5%; Water (nontoxic) – 87%. His equivalent concentration (E.C.) would be:

\[
\text{E.C. (X Category) } = \frac{0.01 + 0.001 + 0.0001 + 0.00001 + 0}{10000} = 0.0000511011%
\]

So his equivalent concentration equals 0.031%.

(c) A person whose waste mixture contains toxic constituents shall determine his designation from the toxic dangerous waste mixtures graph in WAC 173–303–9906 by finding the equivalent concentration percentage for his waste along the abscissa, finding his total waste mixture quantity along the ordinate, and plotting the point on the graph where the horizontal line drawn from his total waste mixture quantity intersects the vertical line drawn from his waste mixture's equivalent concentration. If the plotted point is in the area marked EHW, he shall designate his waste as DW; if the plotted point is in the area marked EHW, he shall designate his waste as EHW.

(d) If a person knows only some of the toxic constituents in his waste mixture, or only some of the constituent concentrations, and if his waste is undesignated for those known constituents or concentrations, then his waste is not designated for toxicity under this subsection.

(e) Toxic dangerous waste mixtures graph. The toxic dangerous waste mixtures graph appears in WAC 173–303–9906.

(6) Persistence.

(a) A person whose waste mixture contains one or more halogenated hydrocarbons for which the concentrations are known shall determine his total halogenated hydrocarbon concentration by summing the concentration percentages for all of those halogenated hydrocarbons for which he knows the concentrations in his waste mixture.
Example 2. A person's waste mixture contains: Carbon tetrachloride - .009%; DDT - .012%; 1,1,1-trichloroethylene - .02%. His total halogenated hydrocarbon concentration would be:

\[
\text{Total HH Concentration} \, (\%) = .009\% + .012\% + .02\% = .041\%
\]

(b) A person whose waste mixture contains one or more polycyclic aromatic hydrocarbons with more than three rings and less than seven rings shall determine his designation from the persistent dangerous waste mixtures graph in WAC 173-303-9907 by finding the total halogenated hydrocarbon concentration for his waste along the ordinate, finding his total waste mixture quantity along the abscissa, and plotting the point on the graph where the horizontal line drawn from his total waste mixture quantity intersects the vertical line drawn from his waste mixture's total halogenated hydrocarbon concentration. If the plotted point is in the area marked DW, then he shall designate his waste DW. If the plotted point is in the area marked EHW, then he shall designate his waste EHW.

(c) A person whose waste mixture contains polycyclic aromatic hydrocarbons with more than three rings and less than seven rings shall determine his designation from the persistent dangerous waste mixtures graph in WAC 173-303-9907 by finding the total polycyclic aromatic hydrocarbon concentration for his waste along the ordinate, and plotting the point on the graph where the horizontal line drawn from his waste mixture's total polycyclic aromatic hydrocarbon concentration intersects the vertical line drawn from his waste mixture's total polycyclic aromatic hydrocarbon concentration. If the plotted point is in the area marked DW, then he shall designate his waste DW. If the plotted point is in the area marked EHW, then he shall designate his waste EHW.

(d) A person whose waste mixture contains polycyclic aromatic hydrocarbons with more than three rings and less than seven rings shall determine his designation from the persistent dangerous waste mixtures graph in WAC 173-303-9907 by finding the total polycyclic aromatic hydrocarbon concentration for his waste along the ordinate, and plotting the point on the graph where the horizontal line drawn from his total waste mixture quantity intersects the vertical line drawn from his waste mixture's total polycyclic aromatic hydrocarbon concentration. If the plotted point is in the area marked DW, then he shall designate his waste DW. If the plotted point is outside of the area marked EHW, then his waste is not designated.

(e) If a person knows only some of the persistent constituents in his waste mixture, or only some of the constituent concentrations, and if his waste is undesignated for those known constituents or concentrations, then his waste is not designated for persistence under this subsection.

(f) Persistent dangerous waste mixtures graph. The persistent dangerous waste mixtures graph appears in WAC 173-303-9907.

Example 3. A person's waste mixture contains: Chrysene - .08%; 3,4-benzopyrene - 1.22%. His total polycyclic aromatic hydrocarbon concentration would be:

\[
\text{Total PAH Concentration} \, (\%) = .08\% + 1.22\% = 1.3\%
\]

(c) A person whose waste mixture contains halogenated hydrocarbons shall determine his designation from the persistent dangerous waste mixtures graph in WAC 173-303-9907 by finding the total halogenated hydrocarbon concentration for his waste along the ordinate, and plotting the point on the graph where the horizontal line drawn from his waste mixture's total halogenated hydrocarbon concentration intersects the vertical line drawn from his waste mixture's total polycyclic aromatic hydrocarbon concentration. If the plotted point is in the area marked EHW, then he shall designate his waste EHW; if the plotted point is in the area marked EH, then he shall designate his waste EH.

(d) A person whose waste mixture contains polycyclic aromatic hydrocarbons with more than three rings and less than seven rings shall determine his designation from the persistent dangerous waste mixtures graph in WAC 173-303-9907 by finding the total polycyclic aromatic hydrocarbon concentration for his waste along the ordinate, and plotting the point on the graph where the horizontal line drawn from his waste mixture's total polycyclic aromatic hydrocarbon concentration intersects the vertical line drawn from his waste mixture's total halogenated hydrocarbon concentration. If the plotted point is in the area marked DW, then he shall designate his waste DW. If the plotted point is outside of the area marked EHW, then his waste is not designated.

(e) If a person knows only some of the persistent constituents in his waste mixture, or only some of the constituent concentrations, and if his waste is undesignated for those known constituents or concentrations, then his waste is not designated for persistence under this subsection.

(f) Persistent dangerous waste mixtures graph. The persistent dangerous waste mixtures graph appears in WAC 173-303-9907.

(7) Carcinogens. Any person whose waste mixture contains one or more IARC human or animal, positive or suspected carcinogen(s) shall designate his waste DW if:

(a) The total concentration of carcinogen(s) in his waste exceeds 1.0% of the waste quantity; and

(b) The monthly or batch waste quantity exceeds 220 lbs. (100 kg).

(c) For designation purposes, any IARC human or animal, positive or suspected carcinogen that is so rated because of studies involving implantation of the substance into test animals as sole cause for the IARC rating, shall not be carcinogenic. This additional information is available in the IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans.

(8) Assigning dangerous waste numbers. A person whose waste is a dangerous waste mixture shall assign a dangerous waste number from the generic dangerous waste numbers table in WAC 173-303-104, Generic dangerous waste numbers. He shall assign the dangerous waste number from the table which corresponds to the designation for his dangerous waste.

\[\text{[Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-084, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-084, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-084, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-084, filed 2/10/82.]}\]

WAC 173-303-090 Dangerous waste characteristics. (1) Purpose. The purpose of this section is to set forth characteristics which a solid waste might exhibit and which would cause that waste to be a dangerous waste.

(2) Representative samples. The department will consider a sample obtained using any of the applicable sampling methods described in WAC 173-303-110(2), sampling and testing methods, to be a representative sample.

(3) Equivalent test methods. The testing methods specified in this section shall be the only acceptable methods, unless the department approves an equivalent test method in accordance with WAC 173-303-084.

(4) Quantity exclusion limit. A solid waste is a dangerous waste if it exhibits one or more of the dangerous waste characteristics described in subsections (5),(6),(7),(8) of this section. If a person's solid waste exhibits one or more of these characteristics, then he shall be a dangerous waste generator (and may not be considered a small quantity generator as provided in WAC 173-303-070(8)) if the quantity of his waste exceeds 220 lbs. (100 kg) per month or per batch.

(5) Characteristic of ignitability.

(a) A solid waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:

(i) It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume, and has a flash point less than 60 degrees C (140 degrees F), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D-
(iv) When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment;

(v) It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5 can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment;

(vi) It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement;

(vii) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure; or

(viii) It is a forbidden explosive as defined in 49 CFR 173.51, or a Class A explosive as defined in 49 CFR 173.53, or a Class B explosive as defined in 49 CFR 173.88.

(b) A solid waste that exhibits the characteristic of reactivity, but is not designated as a dangerous waste under any of the dangerous waste lists, WAC 173-303-080 through 173-303-084, or dangerous waste criteria, WAC 173-303-101 through 173-303-103, shall be designated DW, and shall be assigned the dangerous waste number of D003.

(8) Characteristic of EP toxicity.

(a) A solid waste exhibits the characteristic of EP toxicity if, using Extraction Procedure Test Methods – 1981 on file with the department, the extract from a representative sample of the waste contains any of the contaminants listed in the EP toxicity list in (c) of this subsection, at concentrations equal to or greater than the respective value given in the list. When the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering, is considered to be the extract for the purposes of this subsection.

(b) A solid waste that exhibits the characteristic of EP toxicity, but is not designated as a dangerous waste under any of the dangerous waste lists, WAC 173-303-080 through 173-303-084, or dangerous waste criteria, WAC 173-303-101 through 173-303-103, has the dangerous waste number specified in the list which corresponds to the toxic contaminant causing it to be dangerous.

(c) EP toxicity list. Two levels of concentration are established for the contaminants listed. Any waste containing one or more contaminants with concentrations in the EHW range shall cause that waste to be designated EHW. Any waste containing contaminants which occur at concentrations in the DW range only (i.e., no EHW contaminants), shall be designated DW.

<table>
<thead>
<tr>
<th>EP TOXICITY LIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerous</td>
</tr>
<tr>
<td>Waste Number</td>
</tr>
<tr>
<td>D004</td>
</tr>
<tr>
<td>D005</td>
</tr>
<tr>
<td>D006</td>
</tr>
<tr>
<td>D007</td>
</tr>
</tbody>
</table>

[1988 WAC Supp—page 464]
Dangerous Waste Regulations  

173–303–101 Toxic dangerous wastes. (1) Purpose. This section describes methods for determining the toxicity of a waste and the criteria by which a toxic waste shall be designated DW or EHW.

(2) Categorization. (a) The following toxic category table establishes categories (X, A, B, C, or D) for particular toxicity levels. The X category is the most toxic, and the D category is least toxic. Substances which have toxicity levels below the D category are generally considered to be nontoxic.

<table>
<thead>
<tr>
<th>Toxic Category Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAC 173-303-101</td>
</tr>
<tr>
<td>Purpose. This section describes methods for determining the toxicity of a waste and the criteria by which a toxic waste shall be designated DW or EHW.</td>
</tr>
<tr>
<td>(2) Categorization. (a) The following toxic category table establishes categories (X, A, B, C, or D) for particular toxicity levels. The X category is the most toxic, and the D category is least toxic. Substances which have toxicity levels below the D category are generally considered to be nontoxic.</td>
</tr>
</tbody>
</table>

(b) In order to determine the toxic categories for the constituents in his waste, a person must obtain toxicity data on the constituents either through knowledge he has about his waste, or by obtaining data from the two sources referenced in subsection (3)(a) and (b) of this section, (EPA's Spill Table and NIOSH Registry). If data obtained for a constituent is available for more than one of the toxicity criteria (aquatic, oral, inhalation, or dermal), then the data of severest toxicity shall be used to assign the most acutely toxic category to the waste constituent.

(3) Establishing waste toxicity. A person shall establish the toxicity of his waste or waste constituents by applying his knowledge about his waste, or by using the following information sources or testing methods, or all of these:

(a) The National Institute for Occupational Safety and Health (NIOSH) document Registry of Toxic Effects of Chemical Substances (Registry);

(b) The United States EPA's regulation 40 CFR Table 302.4 (Spill Table); and

(c) The bioassay testing methods adopted under WAC 173–303–110(3).

(4) Book designation procedure. (a) A person may use the book designation procedure described in this paragraph only if:

(i) He knows the toxic categories (as set forth in subsection (2) of this section) for the significant toxic constituents in his waste;

(ii) He knows the concentrations of the significant toxic constituents in his waste;

(iii) He can demonstrate to the department beyond a reasonable doubt that any waste constituents about which he has limited or no knowledge do not significantly affect the toxicity of his waste.

(b) Equivalent concentration. A person who is book designating his waste shall determine the equivalent concentration (in percent) of the toxic constituents in his waste by using the following formula:

Equivalent Concentration (%) = \( \Sigma X% + \Sigma A% + \Sigma B% + \Sigma C% + \Sigma D% \)

where \( \Sigma (X,A,B,C, \text{ or } D) \% \) is the sum of all the concentration percentages for a particular toxic category.

Example 1. A person's waste contains: Aldrin (X Category) = .01%; Diuron (B Category) = 1%; Benzene (C Category) = 4%; Phenol (C Category) = 2%; Cyclohexane (C Category) = 5%; Water (nontoxic) = 87%. His equivalent concentration (E.C.) would be:

\[
\begin{align*}
E.C. (% ) &= .01% + 0% + 1% + (4% + 2% + 5%) + 0% \\
&= .01% + 0% + .01% + .01% + 0% = .031%
\end{align*}
\]

So his equivalent concentration equals .031%.

(c) Toxic dangerous waste graph. To book designate his waste, a person shall use the toxic dangerous waste mixtures graph in WAC 173–303–9906, by finding the equivalent concentration percentage for his waste along the abscissa, finding his total waste quantity along the ordinate, and plotting the point on the graph where the horizontal line drawn from his total waste quantity intersects the vertical line drawn from his waste mixture's equivalent concentration. If the plotted point is in the area marked DW, he shall designate his waste DW; if the plotted point is in the area marked EHW, he shall designate his waste EHW.

(5) Designation from bioassay data. If a person has established the toxicity of his waste by means of the bioassay test methods adopted under WAC 173–303–110(3), and has determined his waste's toxicity range (C category or greater toxicity, or D category toxicity), then he shall designate his waste according to the toxic dangerous waste designation table, below.

<table>
<thead>
<tr>
<th>Toxic Dangerous Waste Designation Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>If your waste's toxic range falls in the . . .</td>
</tr>
<tr>
<td>D Category</td>
</tr>
</tbody>
</table>
173-303-101
Title 173 WAC: Ecology, Department of...

TOXIC DANGEROUS WASTE DESIGNATION TABLE

<table>
<thead>
<tr>
<th>If your waste's toxic range falls in the...</th>
<th>And your monthly or batch waste quantity is...</th>
<th>Then your waste's designation is...</th>
</tr>
</thead>
<tbody>
<tr>
<td>X, A, B, or C Category</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40-220 lbs. (18.2-100 kg)</td>
<td>DW</td>
<td></td>
</tr>
<tr>
<td>Greater than 220 lbs. (100 kg)</td>
<td>EHW</td>
<td></td>
</tr>
</tbody>
</table>


WAC 173-303-102 Persistent dangerous wastes. (1) Purpose. This section describes the procedures for designating wastes which contain halogenated hydrocarbons (HH) and/or polycyclic aromatic hydrocarbons with more than three rings and less than seven rings (PAH).

(2) Concentration determination. A person shall determine the concentration of HH and/or PAH in his waste by either testing his waste as specified in (a) of this subsection, or by the calculation procedures described in (b) of this subsection.

(a) Concentration tests. A person shall test his waste to determine its concentration level as follows:

(i) For HH – By using the testing methods specified in WAC 173-303-110 (3)(a)(v); and,

(ii) For PAH – By using the testing methods specified in WAC 173-303-110 (3)(a)(vi).

(b) Concentration calculations. If a person knows the concentrations of the significant persistent constituents in his waste, and if he can demonstrate to the department beyond a reasonable doubt that any remaining persistent constituents for which he does not know the concentrations would not contribute significantly to the total persistent concentration, then he may calculate the concentration of persistent constituents in his waste as follows:

(i) A person whose waste contains one or more halogenated hydrocarbons for which the concentrations are known shall determine his total halogenated hydrocarbon concentration by summing the concentration percentages for all of his waste's significant halogenated hydrocarbons.

Example 1. A person's waste contains: Carbon tetrachloride – .009%; DDT – .012%; 1,1,1 – trichloroethylene – .02%. His total halogenated hydrocarbon concentration would be:

Total HH Concentration (%) = .009% + .012% + .02% = .041%

(ii) A person whose waste contains one or more polycyclic aromatic hydrocarbons with more than three rings and less than seven rings for which the concentrations are known shall determine his total polycyclic aromatic hydrocarbon concentration by summing the concentration percentages for all of his waste's significant polycyclic aromatic hydrocarbons with more than three rings and less than seven rings.

Example 2. A person's waste contains: Chrysene – .08%; 3, 4 – benzopyrene – 1.22%. His total polycyclic aromatic hydrocarbon concentration would be:

Total PAH Concentration (%) = .08% + 1.22% = 1.3%

(3) Designation criteria and quantity. A person whose waste contains persistent (HH or PAH) constituents shall designate his waste according to the persistent dangerous waste table, below, if his monthly or batch waste quantity exceeds 220 lbs. (100 kg).

PERSISTENT DANGEROUS WASTE TABLE

<table>
<thead>
<tr>
<th>If your waste contains...</th>
<th>At a concentration level of...</th>
<th>Then your waste's designation is...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Halogenated</td>
<td>0.01 to 1.0%</td>
<td>DW</td>
</tr>
<tr>
<td>Hydrocarbons (HH)</td>
<td>greater than 1.0%</td>
<td>EHW</td>
</tr>
<tr>
<td>Polycyclic Aromatic</td>
<td>greater than 1.0%</td>
<td>EHW*</td>
</tr>
<tr>
<td>Hydrocarbons (PAH)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* No DW concentration level for PAH.

[Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-102, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-102, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-102, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-102, filed 2/10/82. Formerly WAC 173-302-130.]

WAC 173-303-103 Carcinogenic dangerous wastes. (1) Criteria. A substance which is listed in the National Institute for Occupational Safety and Health (NIOSH) document Registry of Toxic Effects of Chemical Substances (Registry), or any other scientific or technical documents, as an IARC (International Agency for Research on Cancer) human or animal, positive or suspected carcinogen, shall be a carcinogenic substance for the purposes of this section. Any IARC identified substance which is an inorganic, respiratory carcinogen shall be a carcinogenic substance only if it occurs in a friable format (i.e., if it is in a waste which easily crumbles and forms dust which can be inhaled).

(2) Designation. Any person whose waste contains one or more IARC carcinogen(s) shall designate his waste if:

(a) The monthly or batch waste quantity exceeds 220 lbs. (100 kg); and either

(b)(i) The concentration of any one IARC positive (human or animal) carcinogen exceeds 1.0% of the waste quantity. Such waste shall be designated EHW, and such designation shall take precedence over any DW designation determined by (b)(ii) or (iii) of this subsection; or

(ii) The concentration of any one IARC positive (human or animal) carcinogen exceeds 0.01% of the waste quantity. Such waste shall be designated DW; or

(iii) The total concentration summed for all IARC positive and suspected (human and animal) carcinogens exceeds 1.0% of the waste quantity. Such waste shall be designated DW.

[1988 WAC Supp—page 466]
(c) For designation purposes, any IARC human or animal, positive or suspected carcinogen that is so rated because of studies involving implantation of the substance into test animals as sole cause for the IARC rating, shall not be carcinogenic. This additional information is available in the IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans.

WAC 173–303–120 Recycled, reclaimed, and recovered wastes. (1) This section describes the requirements for persons who recycle materials that are solid wastes and dangerous. Except as provided in subsections (2) and (3) of this section, dangerous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities of subsection (4) of this section. Dangerous wastes that are recycled will be known as "recyclable materials."

(2)(a) The following recyclable materials are solid wastes and sometimes are dangerous wastes. However, they are subject only to the requirements of (b) of this subsection, WAC 173–303–050, 173–303–145 and 173–303–960:

(i) Industrial ethyl alcohol that is reclaimed;
(ii) Used batteries (or used battery cells) returned to a battery manufacturer for regeneration;
(iii) Used oil that exhibits one or more of the characteristics or criteria of dangerous waste and is recycled in some manner other than:
   (A) Being burned for energy recovery; or
   (B) Being used in a manner constituting disposal, except when such use is by the generator on his own property;
   (iv) Scrap metal;
(v) Fuels produced from the refining of oil–bearing dangerous wastes along with normal process streams at a petroleum refining facility if such wastes result from normal petroleum refining, production, and transportation practices;
(vi) Oil reclaimed from dangerous waste resulting from normal petroleum refining, production, and transportation practices, which oil is to be refined along with normal process streams at a petroleum refining facility;
(vii) Coke and coal tar from the iron and steel industry that contains dangerous waste from the iron and steel production process;
(viii) (A) Dangerous waste fuel produced from oil–bearing dangerous wastes from petroleum refining, production, or transportation practices, or produced from oil reclaimed from such dangerous wastes, where such dangerous wastes are reintroduced into a process that does not use distillation or does not produce products from crude oil so long as the resulting fuel meets the used oil specification under WAC 173–303–515 (1)(d) and so long as no other dangerous wastes are used to produce the dangerous waste fuel;
(B) Dangerous waste fuel produced from oil–bearing dangerous waste from petroleum refining production, and transportation practices, where such dangerous wastes are reintroduced into a refining process after a point at which contaminants are removed, so long as the fuel meets the used oil fuel specification under WAC 173–303–515 (1)(e); and
(C) Oil reclaimed from oil–bearing dangerous wastes from petroleum refining, production, and transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, so long as the reclaimed oil meets the used oil fuel specification under WAC 173–303–515 (1)(e); and
   (ix) Petroleum coke produced from petroleum refinery dangerous wastes containing oil at the same facility at which such wastes were generated, unless the resulting coke product exhibits one or more of the characteristics of dangerous waste in WAC 173–303–090.

(b) Any recyclable material listed in (a) of this subsection will be subject to the applicable requirements listed in subsection (4) of this section if the department determines, on a case–by–case basis, that:
   (i) It is being accumulated, used, reused, or handled in a manner that poses a threat to public health or the environment; or
   (ii) Due to the dangerous constituent(s) in it, any use or reuse would pose a threat to public health or the environment. Such recyclable material will be listed in WAC 173–303–016(6).


(a) Recycling requirements for state–only dangerous wastes (see WAC 173–303–500);
(b) Recyclable materials used in a manner constituting disposal (see WAC 173–303–505);
(c) Dangerous wastes burned for energy recovery in boilers and industrial furnaces that are not regulated under Subpart O of 40 CFR Part 265 or WAC 173–303–670 (see WAC 173–303–510);
(d) Used oil that is burned for energy recovery in boilers and industrial furnaces that are not regulated under Subpart O of 40 CFR Part 265 or WAC 173–303–670, if such used oil:
   (i) Exhibits one or more of the characteristics of a dangerous waste; or
   (ii) Is designated as DW solely through WAC 173–303–084 or 173–303–101 through 173–303–103; or
   (iii) Is designated solely as W001, (see WAC 173–303–515);
   (e) Spent lead–acid batteries that are being reclaimed (see WAC 173–303–520);
   (f) Recyclable materials from which precious metals are reclaimed (see WAC 173–303–525);
   (g) Those recycling processes not specifically discussed in subsections (2) and (3) of this section are generally subject to regulation only up to and including storage prior to recycling.

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The recycling process itself is generally exempt from regulation unless the department determines, on a case-by-case basis, that the recycling process poses a threat to public health or the environment.

Unless specified otherwise in subsections (2) and (3) of this section:

(a) Generators of recyclable materials are subject to all applicable requirements of this chapter including, but not limited to, WAC 173-303-170 through 173-303-230;

(b) Transporters of recyclable materials are subject to all applicable requirements of this chapter including, but not limited to, WAC 173-303-240 through 173-303-270;

(c) Owners or operators of facilities that receive recyclable materials from off-site and recycle these recyclable materials without storing them before they are recycled are subject to the following requirements:

(i) WAC 173-303-060, and

(ii) WAC 173-303-370;

(d) Owners or operators of facilities that store recyclable materials before they are recycled are subject to the following requirements including, but not limited to:

(i) For all recyclers, the applicable provisions of:

(A) WAC 173-303-280 through 173-303-395, and

(B) WAC 173-303-420,

(ii) For recyclers with interim status permits, the applicable storage provisions of WAC 173-303-400 including Subparts F through L of 40 CFR Part 265;

(iii) For recyclers with final facility permits, the applicable storage provisions of:

(A) WAC 173-303-600 through 173-303-650, and

(B) WAC 173-303-660.

WAC 173-303-140 Land disposal restrictions. (1) Purpose.

(a) The purpose of this section is to encourage the best management practices for dangerous wastes according to the priorities of RCW 70.105.150 which are, in order of priority:

(i) Reduction;

(ii) Recycling;

(iii) Physical, chemical, and biological treatment;

(iv) Incineration;

(v) Stabilization and solidification; and

(vi) Landfill.

(b) This section identifies dangerous wastes that are restricted from land disposal, describes requirements for restricted wastes, and defines the circumstances under which a prohibited waste may continue to be land disposed.

(c) For the purposes of this section, the term "landfill," as stated in the priorities of RCW 70.105.150, shall be the same as the term "land disposal." Land disposal will be used in this section to identify the lowest waste management priority.

(2) Applicability.

The land disposal restrictions of this section apply to any person who owns or operates a land disposal facility in Washington state and to any generator affected by the restrictions and prohibitions in subsection (4) of this section, unless allowed pursuant to subsections (5), (6), or (7) of this section.

(3) Definitions.

When used in this section the following terms have the meaning provided in this subsection. All other terms have the meanings given under WAC 173-303-040.

(a) "Dangerous waste constituents" means those constituents listed in WAC 173-303-9905 and any other constituents which have caused a waste to be a dangerous waste under this chapter.

(b) "Ignitable waste" means a dangerous waste that exhibits the characteristic of ignitability described in WAC 173-303-090(5).

(c) "Land disposal" means placement in a facility or on the land with the intent of leaving the dangerous waste at closure, and includes, but is not limited to, placement for disposal purposes in a: Landfill; surface impoundment; waste pile; injection well; land treatment facility; salt dome or salt bed formation; underground cave or mine; concrete vault or bunker.

(d) "Leachable inorganic waste" means solid dangerous waste (i.e., passes paint filter test) that is not an organic/ carbonaceous waste and exhibits the characteristic of EP toxicity described in WAC 173-303-110.

(e) "Organic/ carbonaceous waste" means a dangerous waste that contains combined concentrations of greater than ten percent organic/ carbonaceous constituents in the waste; organic/ carbonaceous constituents are those substances that contain carbon--hydrogen, carbon--halogen, or carbon--carbon chemical bonding.

(f) "Reactive waste" means a dangerous waste that exhibits the characteristic of reactivity described in WAC 173-303-090(7).

(g) "Solid acid waste" means a dangerous waste that exhibits the characteristic of low pH under the corrosivity tests of either WAC 173-303-090 (6)(a)(i) or (iii).

(h) "Stabilization" and "solidification" mean a technique that limits the solubility and mobility of dangerous waste constituents. Solidification immobilizes a waste through physical means and stabilization immobilizes the waste by bonding or chemically reacting with the stabilizing material.

(4) Land disposal restrictions and prohibitions. The land disposal requirements of this subsection apply to land disposal in Washington state.

(a) Disposal of extremely hazardous waste (EHW). No person shall land dispose of EHW, except as provided in subsection (5) of this section, at any land disposal facility in the state. No person shall land dispose of EHW at the facility established under RCW 70.105-.050, except as provided by subsections (5), (6), and (7)
of this section. A person is encouraged to reclaim, recycle, recover, treat, detoxify, neutralize, or otherwise process EHW to remove or reduce its harmful properties or characteristics, provided that such processing is performed in accordance with the requirements of this chapter.

(b) Disposal of liquid waste. Special requirements for the disposal of liquid waste in landfills:

(i) Bulk or noncontainerized liquid waste or waste containing free liquids must not be placed in a landfill unless, before disposal, the liquid waste or waste containing free liquids is treated so that free liquids are no longer present.

(ii) Containers holding free liquids must not be placed in a landfill unless:

(A) All free-standing liquid:

(I) Has been removed by decanting, or other methods; or

(II) Has been mixed with absorbent or stabilized (solidified) so that free-standing liquid is no longer observed; or

(III) Has been otherwise eliminated; or

(B) The container is very small, such as an ampule; or

(C) The container is a lab pack and is disposed of in accordance with WAC 173-303-161 and this chapter.

(iii) To demonstrate the absence or presence of free liquids in either a containerized or a bulk waste, the following tests must be used: Method 9095 (Paint Filter Liquids Test) as described in Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods. (EPA Publication No. SW-846.)

(c) Disposal of ignitable and reactive waste. No person shall land dispose ignitable or reactive waste, except as provided in subsections (5), (6), or (7) of this section. A person is encouraged to reclaim, recycle, recover, treat, detoxify, neutralize, or otherwise process these wastes to remove or reduce their harmful properties or characteristics, provided that such processing is performed in accordance with the requirements of this chapter.

(d) Disposal of solid acid waste. No person shall land dispose solid acid waste, except as provided in subsections (5), (6), or (7) of this section. A person is encouraged to reclaim, recycle, recover, treat, detoxify, neutralize, or otherwise process these wastes to remove or reduce their harmful properties or characteristics, provided that such processing is performed in accordance with the requirements of this chapter.

(e) Disposal of organic/carbonaceous waste.

(i) No person shall land dispose organic/carbonaceous waste, except as provided in subsections (5), (6), or (7) of this section. A person is encouraged to reclaim, recycle, recover, treat, detoxify, or otherwise process these wastes to remove or reduce their harmful properties or characteristics, provided that such processing is performed in accordance with the requirements of this chapter. Organic/carbonaceous wastes must be incinerated as a minimum management method according to the dangerous waste management priorities as defined in subsection (1)(a) of this section.

(ii) This prohibition against the land disposal of organic/carbonaceous waste does not apply to black mud generated from the caustic leach recovery of cryolite at primary aluminum smelting plants.

(iii) This prohibition against the land disposal of organic/carbonaceous waste does not apply to any person who certifies to the department that recycling, treatment and incineration facilities are not available within a radius of one thousand miles from Washington state's borders. Such certification must be sent to the department by certified mail and must include: The name, address and telephone number of the person certifying; a brief description of the organic/carbonaceous waste covered by the certification; a discussion of the efforts undertaken to identify available recycling, treatment and incineration facilities; and the signature of the person responsible for the certification and development of information used to support the certification. Records and information supporting the certification must be retained by the certifying person and must be made available to the department upon request.

A certification that has been properly submitted to the department will remain valid until the department determines that a recycling, treatment or incineration facility is available within a radius of one thousand miles from Washington state's borders and the person who submitted the certification is unable to demonstrate otherwise. A recycling, treatment or incineration facility will be considered by the department to be available if such facility: Is operating, and; can safely and legally recycle, treat or incinerate the organic/carbonaceous waste, and; has sufficient capacity to receive and handle significant amounts of the waste, and; agrees to accept the waste.

(f) Disposal of leachable inorganic waste. No person shall land dispose a leachable inorganic waste, except as provided in subsections (5), (6), or (7) of this section. Leachable inorganic waste must be stabilized (solidified) as a minimum management method according to the dangerous waste management priorities as defined in subsection (1)(a) of this section or the leachable inorganic waste must be lab packaged in a container that complies with WAC 173-303-161. A person is encouraged to reclaim, recycle, recover, treat, detoxify, or otherwise process these wastes to remove or reduce their harmful properties or characteristics, provided that such processing is performed in accordance with the requirements of this chapter.

(g) Disposal of dioxin containing wastes. These wastes are regulated by federal regulations contained in 40 CFR Part 268 that restrict the land disposal of dioxin containing wastes.

(h) Disposal of solvent wastes. These wastes are regulated by federal regulations contained in 40 CFR Part 268 that restrict the land disposal of solvent wastes.

(5) Treatment in land disposal facilities. The land disposal restrictions in subsection (4) of this section do not apply to persons treating dangerous wastes in surface impoundments, waste piles, or land treatment facilities provided that such treatment is performed in accordance with the requirements of this chapter.

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with the requirements of this subsection and this chapter.

(a) Surface impoundment treatment.

(i) Liquid waste, extremely hazardous waste (EHW), solid acid waste, leachable inorganic waste, and organic/carbonaceous waste may be placed in surface impoundments for purposes of treatment provided the owner/operator can demonstrate that effective treatment of the dangerous waste constituents will occur and that at closure the owner/operator complies with the prohibitions and restrictions of subsection (4) of this section.

(ii) Ignitable waste and reactive waste may be placed in surface impoundments provided that:
   (A) The conditions in (a)(i) of this subsection are complied with; and
   (B) The ignitable or reactive waste is treated, rendered, or mixed before or immediately after placement in the impoundment so that the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under WAC 173-303-090, and 173-303-395(1) is complied with.

(b) Waste pile treatment.

(i) Leachable inorganic waste, liquid waste, extremely hazardous waste (EHW), solid acid waste, and organic/carbonaceous waste may be placed in waste piles for purposes of treatment provided the owner/operator can demonstrate that effective treatment of dangerous waste constituents will occur and that at closure the owner/operator will be in compliance with the prohibitions and restrictions of subsection (4) of this section.

(ii) Ignitable waste and reactive waste may be placed in a waste pile provided that:
   (A) The conditions in (b)(i) of this subsection are complied with; and
   (B) The placement of the ignitable or reactive waste onto an existing waste pile results in the waste or mixture no longer meeting the definition of ignitable or reactive under WAC 173-303-090, and 173-303-395(1) is complied with.

(c) Land treatment.

(i) Liquid waste, extremely hazardous waste (EHW), organic/carbonaceous waste, and leachable inorganic waste may be land treated provided that the owner/operator can demonstrate that effective treatment of dangerous waste constituents will occur, and at the end of the post-closure care period the owner/operator will be in compliance with subsection (4) of this section.

(ii) Ignitable waste and reactive waste may be land treated provided that:
   (A) The conditions in (c)(i) of this subsection are complied with; and
   (B) The ignitable or reactive waste is immediately incorporated into the soil so that the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under WAC 173-303-090, and complies with WAC 173-303-395(1).

(6) Case-by-case exemptions to a land disposal prohibition. Any person may petition the department for an exemption from a prohibition in subsection (4) of this section for the land disposal of a dangerous waste. The procedures to submit a petition to the department are specified in WAC 173-303-910(6). The department may deny any petition if it determines that there is a potential for dangerous waste constituents to migrate from the land disposal facility where the waste is to be placed. The department will deny any petition when exemption would result in a substantial or imminent threat to public health or the environment. The department will deny any petition when exemption would result in a violation of applicable state laws.

The department may grant an exemption from the prohibitions and restrictions of subsection (4) of this section based on the demonstrations specified in (a), (b), (c), or (d) of this subsection.

(a) Land disposal exemption for treatment residuals. Any person may request an exemption from a land disposal prohibition in subsection (4) of this section for treatment residuals by demonstrating to the department that:
   (i) The person has applied the best achievable management method to the original waste; and
   (ii) Application of additional management methods to the treatment residuals would prevent the person from utilizing the best achievable management methods for the original dangerous waste; and
   (iii) The land disposal of the treatment residuals does not pose a greater risk to the public health and the environment than land disposal of the original dangerous waste would pose.

(b) Economic hardship exemption. Any person may request an exemption from a prohibition in subsection (4) of this section for the land disposal of a dangerous waste by demonstrating to the department that alternative management of the dangerous waste will impose an unreasonable economic burden in relation to the threat of harm to public health and the environment. It will be solely within the discretion of the department to approve or deny the requests for exemptions based on economic hardship.

(c) Leachable inorganic waste exemption. Any person may request an exemption from the stabilization (solidification) requirement in subsection (4)(f) of this section by demonstrating to the department that:
   (i) The stabilization (solidification) of a dangerous waste is less protective of human health and the environment than landfilling; or
   (ii) Stabilization (solidification) capacity is unavailable. This demonstration may include technical and practical difficulties associated with providing alternative capacity. A person must provide a detailed schedule and plan for alternative capacity; or
   (iii) Stabilization (solidification) techniques have been applied to the original waste and further efforts at stabilization (solidification) would not result in significantly reducing the solubility and mobility of the dangerous waste constituents.

(d) Organic/carbonaceous waste exemption. Any person may request an exemption from the requirements in subsection (4) of this section by demonstrating to the department that:
(i) Alternative management methods for organic/carbonaceous waste are less protective of public health and the environment than stabilization or landfilling; or

(ii)(A) The organic/carbonaceous waste has a heat content less than 3,000 BTU/LB or contains greater than sixty-five percent water or other noncombustible moisture; and

(B) Incineration is the only management method available within a radius of one thousand miles from Washington state's border (i.e., recycling or treatment are not available).

(7) Emergency cleanup provision. The department may, on a case-by-case basis, grant an exception to the land disposal restrictions in subsection (4) of this section for an emergency cleanup where an imminent threat to public health and the environment exists. Any exception will require compliance with applicable state law and will require (consistent with the nature of the emergency and imminent threat) application of the waste management priorities of RCW 70.105.150.

WAC 173-303-170 Requirements for generators of dangerous waste. (1) A person shall be a dangerous waste generator if his solid waste is designated by the requirements of WAC 173-303-070 through 173-303-103.

(a) The generator shall be responsible for designating his waste as DW or EHW.

(b) The generator may request an exemption for his dangerous waste according to the procedures of WAC 173-303-072.

(2) A dangerous waste generator shall notify the department and obtain an EPA/state identification number as required by WAC 173-303-060, and shall comply with the requirements of WAC 173-303-170 through 173-303-230.

(3) Except for the accumulation and storage of dangerous wastes for less than ninety days as allowed under WAC 173-303-200, any generator who transfers, stores, treats, or disposes of dangerous waste on-site shall perform his operations in accordance with the TSD facility requirements of this chapter.

(4) The generator of a special waste may, upon approval by the department, for special waste only:

(a) Develop and implement an alternative manifest mechanism in lieu of the requirements of WAC 173-303-180 for special waste shipments. Such alternative mechanism might employ a single manifest for multiple shipments of the same special waste, might not require signatures or multiple copies for transporters or designated receiving facilities, and might include such other factors as the generator might develop and the department approve. The generator must, however, demonstrate to the department's satisfaction before implementing the alternative mechanism that it will assure accurate tracking and recording of waste shipments, and that the mechanism provides for the proper submission of exception reports as specified in WAC 173-303-220(2). The generator shall be responsible for assuring that all transporters and facilities involved in implementing the alternative manifest mechanism are complying with the terms and conditions of the mechanism as approved by the department; and

(b) Pursuant to the requirements of WAC 173-303-200, accumulate special waste in containers and tanks for up to one hundred eighty days, and accumulate special waste in piles for up to ninety days provided that he complies with WAC 173-303-660 (2), (3)(a), (b)(i), (ii)(A), (7), (8), and (9)(a).

(5) The generator must comply with the special land disposal restrictions for certain dangerous wastes in WAC 173-303-140.

WAC 173-303-201 Special accumulation standards. (1) This section applies to persons who generate less than 2200 pounds (1000 kg) per month and do not accumulate on-site more than 2200 pounds (1000 kg) of dangerous waste. The special provisions of this section do not apply to any acutely hazardous wastes (as defined in WAC 173-303-040(2)) that are being generated or accumulated by the generator.

(2) For purposes of accumulating dangerous waste on-site, persons who generate per month and accumulate on-site less than 2200 pounds (1000 kg) per month of dangerous waste are subject to all applicable provisions of WAC 173-303-200 except as follows:

(a) In lieu of the ninety-day accumulation period, dangerous wastes may be accumulated for one hundred eighty days or less. The department may, on a case-by-case basis, grant a maximum ninety-day extension to this one hundred eighty-day period if the generator must transport his waste, or offer his waste for transportation, over a distance of two hundred miles or more for off-site treatment, storage, or disposal, and the dangerous wastes must remain on-site due to unforeseen, temporary and uncontrollable circumstances;

(b) The generator need not comply with WAC 173-303-330 (Personnel training); and

(c) In lieu of the contingency plan and emergency procedures required by WAC 173-303-350 and 173-303-360, the generator must comply with the following:

(i) At all times there must be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures specified in (c)(iv) of this subsection. This employee is the emergency coordinator.

(ii) The generator must post the following information next to all emergency communication devices (including telephones, two-way radios, etc.):
(A) The name and telephone number of the emergency coordinator;
(B) Location of fire extinguishers and spill control material, and, if present, fire alarm; and
(C) The telephone number of the fire department, unless the facility has a direct alarm.

(iii) The generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies;
(iv) The emergency coordinator or his designee must respond to any emergencies that arise. The applicable responses are as follows:

(A) In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;
(B) In the event of a spill, contain the flow of dangerous waste to the extent possible, and as soon as is practicable, clean up the dangerous waste and any contaminated materials or soil;
(C) In the event of a fire, explosion, or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached waters of the state, the generator must immediately notify the department and either the government official designated as the on-scene coordinator, or the National Response Center (using their twenty-four hour toll free number 800/424-8802). The report must include the following information:
   (I) The name, address, and EPA/state identification number of the generator;
   (II) Date, time, and type of incident (e.g., spill or fire);
   (III) Quantity and type of hazardous waste involved in the incident;
   (IV) Extent of injuries, if any; and
   (V) Estimated quantity and disposition of recovered materials, if any.

[Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-220, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-220, filed 6/3/86; 86-12-057 (Order DE 83-36), § 173-303-220, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-220, filed 2/10/82.]

WAC 173-303-220 Generator reporting. The generator shall submit the following reports to the department by the specified due date for each report, or within the time period allowed for each report.

(1) Annual reports.
   (a) A generator or any person who has obtained an EPA/state identification number pursuant to WAC 173-303-060 shall submit an annual report to the department, on the Generator Annual Dangerous Waste Report – Form 4 according to the instructions on the form (copies are available from the department), no later than March 1 for the preceding calendar year.
   (b) In addition, any generator who stores, treats, or disposes of dangerous waste on-site shall comply with the annual reporting requirements of WAC 173-303-390, Facility reporting.
(2) Exception reports.
   (a) A generator who does not receive a copy of the manifest with the handwritten signature of the owner/operator of the designated facility within thirty-five days of the date the waste was accepted by the initial transporter must contact the transporter(s) and/or facility to determine the status of the dangerous waste shipment.
   (b) A generator must submit an exception report to the department if he has not received a copy of the manifest with the handwritten signature of the owner/operator of the designated facility within forty-five days of the date the waste was accepted by the initial transporter.
   (c) The exception report must include:
      (i) A legible copy of the manifest for which the generator does not have confirmation of delivery; and
      (ii) A cover letter signed by the generator or his representative explaining the efforts taken to locate the waste and the results of those efforts.
   (d) The department may require a generator to submit exception reports in less than forty-five days if it finds that the generator frequently or persistently endangers public health or the environment through improper waste shipment practices.

(3) Additional reports. The director, as he deems necessary under chapter 70.105 RCW, may require a generator to furnish additional reports concerning the quantities and disposition of his dangerous waste.

[Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-220, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-220, filed 6/3/86; 86-12-057 (Order DE 83-36), § 173-303-220, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-220, filed 2/10/82.]

WAC 173-303-230 Special conditions. (1) Exporting dangerous waste.

Federal export requirements, administered by EPA, are set forth in 40 CFR 262.50 and specify the procedures applicable to generators of hazardous waste (as defined in WAC 173-303-040(39)). Copies of any forms or reports submitted to the administrator of United States EPA as required by 40 CFR 262.50 shall also be submitted to the department.

(2) Importing dangerous waste. When importing dangerous waste from a foreign country into Washington state, the United States importer shall comply with all the requirements of this chapter for generators, including the requirements of WAC 173-303-180(1), except that:

(a) In place of the generator's name, address and EPA/state identification number, the name and address of the foreign generator and the importer's name, address and EPA/state identification number shall be used; and
(b) In place of the generator's signature on the certification statement, the United States importer or his agent shall sign and date the certification and obtain the signature of the initial transporter.

(3) Empty containers. For the purposes of this chapter, a person who stores, treats, disposes, transports, or offers for transport empty containers of dangerous waste that were for his own use shall not be treated as a generator or as a facility owner/operator if the containers
WAC 173–303–240 Requirements for transporters of dangerous waste. (1) Transporters shall comply with the requirements of WAC 173–303–060, Notification and identification numbers. Transporters who are involved in interstate transport shall use the identification number assigned to their national headquarters office, unless the department requires, on a case-by-case basis, that a transporter obtain his own unique EPA/state ID#. Transporters who are involved only in intrastate transport shall use the identification number assigned to their headquarters office located within the state. Transporters who must comply with the generator requirements as a result of a spill at a terminal or during transport shall obtain a separate generator EPA/state ID# for such spill or terminal.

(2) Any person who transports a dangerous waste shall comply with the requirements of WAC 173–303–240 through 173–303–270, when such dangerous waste is required to be manifested by WAC 173–303–180.

Any person who transports special waste shall, if the generator of the waste has implemented an alternative manifest mechanism approved by the department under WAC 173–303–170 (4)(a), comply with the terms and conditions specified by the generator and approved by the department for the alternative manifest mechanism.

(3) Any person who transports a dangerous waste shall also comply with the requirements of WAC 173–303–170 through 173–303–230 for generators, if he:

(a) Transports dangerous waste into the state from another country; or

(b) Mixes dangerous waste of different United States DOT shipping descriptions by mixing them into a single container.

(4) These requirements shall not apply to on-site (as defined in WAC 173–303–040) transportation of dangerous waste by generators, or by owners/operators of permitted TSD facilities.

(5) Transporters may store manifested shipments of dangerous waste in containers meeting the requirements of WAC 173–303–190 (1), (2), and (3) for ten days or less. Transporters may not accumulate or store manifested shipments of dangerous waste for more than ten days. Reference to WAC 173–303–200 in 173–303–240(3) does not constitute authority for storage in excess of ten days for transporters. Transporters who do not comply with these conditions are subject to all applicable TSD facility requirements.

WAC 173–303–280 General requirements for dangerous waste management facilities. (1) Applicability. The requirements of WAC 173–303–280 through 173–303–395 apply to all owners and operators of facilities which store, treat, or dispose of dangerous wastes and which must be permitted under the requirements of this chapter 173–303 WAC, unless otherwise specified in this chapter. The owner or operator of a facility which manages special waste may comply with the special requirements specified in WAC 173–303–550 through 173–303–560 in lieu of the general requirements of WAC 173–303–280 through 173–303–395, but only for those special wastes which he manages. Whenever a shipment of dangerous waste is initiated from a facility, the owner or operator of that facility shall comply with the requirements for generators, WAC 173–303–170 through 173–303–230.

(2) Imminent hazard. Notwithstanding any provisions of this chapter, enforcement actions may be brought in the event that the management practices of a facility present an imminent and substantial hazard to the public health and the environment, regardless of the quantity or concentration of a dangerous waste.

(3) Identification numbers. Every facility owner or operator shall apply for an EPA/state identification number from the department in accordance with WAC 173–303–060.

(4) The owner or operator must comply with the special land disposal restrictions for certain dangerous wastes in WAC 173–303–140.

WAC 173–303–281 Notice of intent. (1) Purpose. The purpose of this section is to provide notification to the department, local communities and the public that the siting of a dangerous waste management facility is being considered. Also, to provide general information about the proposed facility owner/operator, the type of facility and the types of wastes to be managed and compliance with the siting standards.

(2) Applicability. This section applies to owners and operators of proposed facilities. This section also applies
to owners and operators of existing facilities with interim or final status for which the department receives an application for expansion. As used in this section:

(a) "Proposed facility" means a facility that does not have interim or final status on the effective date of this section, and for which the owner/operator applies for an interim or final status permit, under WAC 173-303-805 or 173-303-806, after the effective date of this section;

(b) "Existing facility" means a facility for which an interim or final status permit has been issued by the department pursuant to WAC 173-303-805 or 173-303-806; and

(c) "Expansion" means the enlargement of the land surface area of an existing facility from that described in an interim status permit, the addition of a new dangerous waste management process, or an increase in the overall design capacity of existing dangerous waste management processes at a facility. However, a process or equipment change within the existing handling code (not to include "other") as defined under WAC 173-303-380 (2)(d) will not be considered a new dangerous waste management process.

This section does not apply to owners/operators of facilities or portions of facilities applying for research, development and demonstration permits, pursuant to section 3005(g) of the Resource Conservation and Recovery Act, codified in 40 CFR Part 270.65. In addition, this section does not apply to mobile facilities for on-site cleanup at treatment, storage or disposal facilities undergoing closure, facilities operating under an emergency permit pursuant to WAC 173-303-804, or facilities for on-site cleanup of sites under the Comprehensive Environmental Response Compensation and Liability Act, or chapters 70.105, 70.105B, and 90.48 RCW.

(3) Notice of intent to file for a dangerous waste permit.

(a) The notice of intent to be prepared by the owners/operators of the applicable facilities shall consist of:

(i) The name, address, and telephone number of the owner, operator, and corporate officers;

(ii) The location of the proposed facility or expansion on a topographic map with specifications as detailed in WAC 173-303-806 (4)(a)(xviii);

(iii) A brief description of the types and amounts of wastes to be managed annually;

(iv) A brief description of the major equipment items proposed, if any, and the waste management activities requiring a permit or revision of an existing permit;

(v) An environmental checklist from the State Environmental Policy Act rules, chapter 197-11 WAC;

(vi) Documentation that the proposed facility or expansion site meets the requirements of WAC 173-303-420, Siting standards. Preliminary ground water characterization based on available data shall also be provided;

(vii) For informational purposes a complete summary of compliance violations of permit conditions at hazardous waste management facilities owned or operated by the applicant, its subsidiaries or its parent company, during the ten calendar years preceding the permit application. Along with the summary of compliance violations, as issued by appropriate state or federal regulatory agencies, the applicant shall also submit responses to past violations and any written correspondence with regulatory agencies regarding the compliance status of any hazardous waste management facility owned or operated by the applicant, its subsidiaries or parent company of the owner or operator. A more detailed compliance record must be provided upon request by the department;

(viii) For informational purposes the need for the proposed facility or expansion shall be demonstrated by one of the following methods:

(A) Current overall capacity within Washington is inadequate for dangerous wastes generated in Washington as determined by regional or state dangerous waste management plans; or

(B) The facility is a higher priority management method, as described in RCW 70.105.150, than is currently in place or practical and available for the types of waste proposed to be managed; or

(C) The facility will add to the types of technology available or will reduce cost impacts (not to include transportation costs) to Washington generators for disposal of dangerous wastes; and

(ix) For informational purposes it shall be shown how the capacity of the proposed facility or expansion will affect the overall capacity within the state, in conjunction with existing facilities in Washington.

(b) The notice of intent shall be filed with the department, and copies shall be made available for public review, no less than one hundred fifty days prior to filing an application for a permit or permit revision. Public notification of the notice of intent to file shall be given at the time of filing by announcement in a daily newspaper within the area of the proposed facility or expansion for a minimum of fourteen consecutive days.

(c) Reserved.

[Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-281, filed 9/6/88.]

WAC 173-303-283 Performance standards. (1) Purpose. This section provides general performance standards for designing, constructing, operating, and maintaining dangerous waste facilities.

(2) Applicability. This section applies to all dangerous waste facilities permitted under WAC 173-303-800 through 173-303-840. These general performance standards shall be used to determine whether more stringent facility standards should be applied than those spelled out in WAC 173-303-280, 173-303-290 through 173-303-400 and 173-303-600 through 173-303-670.

(3) Performance standards. Unless authorized by state, local, or federal laws, or unless otherwise authorized in this regulation, the owner/operator shall design, construct, operate, or maintain a dangerous waste facility that to the maximum extent practical given the limits of technology prevents:

(a) Degradation of ground water quality;
(b) Degradation of air quality by open burning or other activities;
(c) Degradation of surface water quality;
(d) Destruction or impairment of flora and fauna outside the active portion of the facility;
(e) Excessive noise;
(f) Conditions that constitute a negative aesthetic impact for the public using rights of ways, or public lands, or for landowners of adjacent properties;
(g) Unstable hillsides or soils as a result of trenches, impoundments, excavations, etc.;
(h) The use of processes that do not treat, detoxify, recycle, reclaim, and recover waste material to the extent economically feasible; and
(i) Endangerment of the health of employees, or the public near the facility.

[Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-283, filed 9/6/88.]

WAC 173-303-284 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-303-285 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-303-286 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-303-360 Emergencies. (1) Emergency coordinator. At all times, there must be at least one employee either on the facility premises or on call with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, required by WAC 173-303-350(2), all operations and activities at the facility, the location and properties of all wastes handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

(2) Emergency procedures. The following procedures shall be implemented in the event of an emergency.
(a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:
   (i) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and
   (ii) Notify appropriate state or local agencies with designated response roles if their help is needed.
(b) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials.
(c) Concurrently, the emergency coordinator shall assess possible hazards to human health and the environment (considering direct, indirect, immediate, and long-term effects) that may result from the release, fire, or explosion.
(d) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment outside the facility, he must report his findings as follows:
   (i) If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and
   (ii) He must immediately notify the department and either the government official designated as the on-scene coordinator, or the National Response Center (using their 24-hour toll free number (800) 424-8802).
(e) His assessment report must include:
   (i) Name and telephone number of reporter;
   (ii) Name and address of facility;
   (iii) Time and type of incident (e.g., release, fire);
   (iv) Name and quantity of material(s) involved, to the extent known;
   (v) The extent of injuries, if any; and
   (vi) The possible hazards to human health or the environment outside the facility.
(f) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other dangerous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.
(g) If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, whenever this is appropriate.
(h) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.
   (i) The emergency coordinator must ensure that, in the affected area(s) of the facility:
      (i) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and
      (ii) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.
   (j) The owner or operator must notify the department, and appropriate local authorities, that the facility is in compliance with (i) of this subsection before operations are resumed in the affected area(s) of the facility.
   (k) The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within fifteen days after the incident, he must submit a written report on the incident to the department. The report must include:
      (i) Name, address, and telephone number of the owner or operator;
      (ii) Name, address, and telephone number of the facility;
WAC 173-303-400 Interim status facility standards. (1) Purpose. The purpose of WAC 173-303-400 is to establish standards which define the acceptable management of dangerous waste during the period of interim status and until certification of final closure or, if the facility is subject to post-closure requirements, until post-closure responsibilities are fulfilled.

(2) Applicability.

(a) The interim status standards apply to owners and operators of facilities which treat, store, transfer, and/or dispose of dangerous waste. For purposes of this section, interim status shall apply to all facilities which comply fully with the requirements for interim status under Section 3005(e) of the Federal Resource Conservation and Recovery Act or WAC 173-303-805. The interim status standards shall also apply to those owners and operators of facilities in existence on November 19, 1980, for RCRA wastes and those facilities in existence on August 9, 1982, for state only wastes who have failed to provide the required notification pursuant to WAC 173-303-060 or failed to file Part A of the permit application pursuant to WAC 173-303-805 (4) and (5).

(b) Interim status facilities must meet the interim status standards by November 19, 1980, except that:

(i) Interim status facilities which handle only state designated wastes (i.e., not designated by 40 CFR Part 261) must meet the interim status standards by August 9, 1982; and

(ii) Interim status facilities must comply with the additional state interim status requirements specified in subsection (3)(c)(ii), (iii) and (v), of this section, by August 9, 1982.

(c) The requirements of the interim status standards do not apply to:

(i) Persons disposing of dangerous waste subject to a permit issued under the Marine Protection, Research and Sanctuaries Act;

(ii) Persons disposing of dangerous waste by underground injection which is permitted under the Safe Drinking Water Act;

(iii) The owner or operator of a POTW who treats, stores, or disposes of dangerous wastes;

(iv) The owner or operator of a totally enclosed treatment facility or elementary neutralization or wastewater treatment units as defined in WAC 173-303-040, provided that he complies with the permit by rule requirements of WAC 173-303-802(5);

(v) Generators accumulating waste for less than ninety days except to the extent WAC 173-303-200 provides otherwise; and

(vi) The addition, by a generator, of absorbent material to a container, or of waste to absorbent material in a container, provided that these actions occur at the time the waste is first placed in containers and the generator complies with WAC 173-303-200 (1)(b) and 173-303-395 (1)(a) and (b).

(d) The owner or operator of an interim status facility which manages special waste may comply with the special requirements selected under WAC 173-303-550 through 173-303-560 in lieu of the interim status facility standards of this section, but only for those special wastes which he manages and only after the owner or operator has requested and the department has issued a notice of interim status modification.

(3) Standards.

(a) Interim status standards shall be standards set forth by the Environmental Protection Agency in 40 CFR Part 265 Subparts F through R which are incorporated by reference into this regulation (including, by reference, any EPA requirements specified in those subparts which are not otherwise explicitly described in this chapter), and:

(i) The land disposal restrictions of WAC 173-303-140 and the facility requirements of WAC 173-303-280 through 173-303-440;

(ii) WAC 173-303-630(3), for containers. In addition, for container storage, the department may require that the storage area include secondary containment in accordance with WAC 173-303-630(7), if the department determines that there is a potential threat to public health or the environment due to the nature of the wastes being stored, or due to a history of spills or releases from stored containers. Any new container storage areas constructed or installed after September 30, 1986, must comply with the provisions of WAC 173-303-630(7).

(iii) WAC 173-303-640 (2)(c), for tanks; and

(iv) WAC 173-303-805.

(b) For purposes of applying the interim status standards of 40 CFR Part 265 Subparts F through R to the state of Washington facilities, the federal terms shall have (and in the case of the wording used in the financial instruments referenced in Subpart H of Part 265, shall be replaced with) the following state of Washington meanings:

(i) "Regional administrator" shall mean the "department";

(ii) "Hazardous" shall mean "dangerous"; and
(iii) "Compliance procedure" shall have the meaning set forth in WAC 173-303-040, Definitions.

(c) In addition to the changes described in (b) of this subsection, the following modifications shall be made to interim status standards of 40 CFR Part 265 Subparts F through R:

(i) The words "the effective date of these regulations" shall mean:

(A) November 19, 1980, for facilities which manage any wastes designated by 40 CFR Part 261; and

(B) March 12, 1982, for facilities which manage wastes designated only by WAC 173-303-080 through 173-303-103 and not designated by 40 CFR Part 261;

(ii) "Subpart N - landfills" shall have an additional section added which reads: "An owner/operator shall not landfill an organic carcinogen or an EHW, as defined by WAC 173-303-080 to 173-303-103, except at the EHW facility at Hanford";

(iii) "Subpart R - underground injection" shall have an additional section which reads: "Owners and operators of wells are prohibited from disposing of EHW or an organic carcinogen designated under WAC 173-303-080 through 173-303-103";

(iv) "Subpart M - land treatment," section 265.273(b) shall be modified to replace the words "Part 261, Subpart D of this chapter" with "WAC 173-303-080";

(v) "Subpart F - ground water monitoring," section 265.91(c) shall include the requirement that: "Groundwater monitoring wells shall be designed, constructed, and operated so as to prevent groundwater contamination. Chapter 173-160 WAC may be used as guidance in the installation of wells"; and

(vi) "Subpart H - financial requirements" shall have an additional section which reads: "Any owner or operator who can provide financial assurances and instruments which satisfy the requirements of WAC 173-303-620 will be deemed to be in compliance with 40 CFR Part 265 Subpart H."

[Statutory Authority: Chapter 70.105 RCW. 88-02-057 (Order DE 83-36), § 173-303-400, filed 1/5/88, effective 2/5/88; 87-14-029 (Order DE-87-4), § 173-303-400, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-400, filed 6/3/86; 84-09-088 (Order DE-83-36), § 173-303-400, filed 4/18/84. Statutory Authority: Chapter 70-105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-400, filed 2/10/82.]

WAC 173-303-420 Siting standards. (1) Purpose.

This section provides criteria for the siting of dangerous waste facilities. The criteria are to be viewed as standards which a facility owner/operator shall meet in siting his facility.

(2) Applicability. These siting standards will apply to all facilities which require a permit under WAC 173-303-805 and 173-303-806, or as otherwise limited in each of the applicable paragraphs of this section.

(3) Earthquake fault criteria.

(a) Active portions of new TSD facilities will not be located within two hundred feet of a fault which has had displacement in Holocene times. For facilities managing moderate risk waste only, engineering efforts, as approved by the department, may be substituted for the two hundred-foot buffer zone.

(b) As used in (a) of this subsection:

(i) "Fault" means a fracture along which rocks on one side have been displaced with respect to those on the other side;

(ii) "Displacement" means the relative movement of any two sides of a fault measured in any direction; and

(iii) "Holocene" means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene to the present.

(c) Facilities which are located in counties other than those listed below are assumed to be in compliance with this subsection.

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(4) Floodplain criteria.

(a) A facility located in a one hundred-year floodplain must be designed, constructed, operated, and maintained to prevent washout of any dangerous waste by a one hundred-year flood, unless, in the case of facilities which manage DW only, the owner or operator has included in his contingency plan (WAC 173-303-350) procedures which will cause the waste to be removed safely, before floodwaters can reach the facility, to a location where the wastes will not be vulnerable to floodwaters. The location to which wastes will be removed must be a facility permitted according to this chapter.

(b) For facilities which manage EHW, a facility located in a one hundred-year floodplain must be designed, constructed, operated, and maintained to prevent washout of any EHW by a one hundred-year flood. Contingency procedures for removal of EHW will not be deemed equivalent to engineered flood proofing.

(c) As used in (a) and (b) of this subsection:

(i) "One hundred-year floodplain" means any land area which is subject to one percent or greater chance of flooding in any given year from any source;

(ii) "Washout" means the movement of dangerous waste from the active portion of the facility as a result of flooding; and

(iii) "One hundred-year flood" means a flood that has a one percent chance of being equalled or exceeded in any given year.

(5) The siting of facilities in areas under the jurisdiction of the 1971 Shoreline Management Act (chapter 90.58 RCW).

(a) Areas defined as "wetlands" under RCW 90.58.030 (2)(f) (those areas under jurisdiction of the Shoreline Management Act) shall not be considered or used for the disposal of dangerous waste.

(b) Dangerous waste storage and treatment facilities, where such facilities have either historically located in areas under jurisdiction of the Shoreline Management
Act, or where such facilities require a waterfront or harbor area location, shall be limited to those locations where the local shoreline management master program permits industrial, navigation, manufacturing, or similar activities. Areas classified natural, conservancy, rural, or residential shall not be considered for the location of a dangerous waste facility.

(6) Sole source aquifer criteria. No new facility shall dispose of dangerous waste over a sole source aquifer designated pursuant to section 1424(e) of the Safe Drinking Water Act (Public Law 93–523).


WAC 173–303–430 (Reserved.)


WAC 173–303–440 (Reserved.)


(a) This section applies to dangerous wastes that are burned for energy recovery in any boiler or industrial furnace that is not regulated under Subpart O of 40 CFR Part 265 or WAC 173–303–670, except as provided by (b) of this subsection. Such dangerous wastes burned for energy recovery are termed "dangerous waste fuel." Fuel produced from dangerous waste by processing, blending, or other treatment is also dangerous waste fuel. (These regulations do not apply, however, to gas recovered from dangerous waste management activities when such gas is burned for energy recovery.)

(b) The following dangerous wastes are not subject to regulation under this section:

(i) Used oil burned for energy recovery if it is a dangerous waste because it:
(A) Exhibits a characteristic of dangerous waste identified in WAC 173–303–090; or
(B) Is designated as DW only through the criteria of WAC 173–303–101 through 173–303–103; or
(C) Is a dangerous waste designated solely as W001. Such used oil is subject to regulation under WAC 173–303–515 rather than this section.

Note: Used oil burned for energy recovery containing a listed waste (unless such listed waste is only state source W001) or a waste designated as EHW through the criteria of WAC 173–303–101 through 173–303–103 is subject to this section.

(ii) (Reserved.)

(2) Prohibitions.

(a) A person may market dangerous waste fuel only:

(i) To persons who have notified the department of their dangerous waste fuel activities under WAC 173–303–060 and have an EPA/state identification number; and

(ii) If the fuel is burned, to persons who burn the fuel in boilers or industrial furnaces identified in (b) of this subsection.

(b) Dangerous waste fuel may be burned for energy recovery in only the following devices:

(i) Industrial furnaces identified in WAC 173–303–040;

(ii) Boilers, as defined in WAC 173–303–040, that are identified as follows:
(A) Industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes; or

(B) Utility boilers used to produce electric power, steam, or heated or cooled air or other gases or fluids for sale.

(c) No fuel which contains any dangerous waste may be burned in any cement kiln which is located within the boundaries of any incorporated municipality with a population greater than five hundred thousand (based on the most recent census statistics) unless such kiln fully complies with regulations under this chapter that are applicable to incinerators.

(3) Standards applicable to generators of dangerous waste fuel.

(a) Generators of dangerous waste that is used as a fuel or used to produce a fuel are subject to WAC 173–303–170 through 173–303–230.

(b) Generators who market dangerous waste fuel to a burner also are subject to subsection (5) of this section.

(c) Generators who are burners also are subject to subsection (6) of this section.

(4) Standards applicable to transporters of dangerous waste fuel. Transporters of dangerous waste fuel (and dangerous waste that is used to produce a fuel) are subject to the requirements of WAC 173–303–240 through 173–303–270.

(5) Standards applicable to marketers of dangerous waste fuel.

Persons who market dangerous waste fuel are termed "marketers," and are subject to the following requirements. Marketers include generators who market dangerous waste fuel directly to a burner, persons who receive dangerous waste from generators and produce, process, or blend dangerous waste fuel from these dangerous wastes, and persons who distribute but do not process or blend dangerous waste fuel.

(a) Prohibitions. The prohibitions under subsection (2) of this section;

(b) Notification. Notification requirements under WAC 173–303–060 for dangerous waste fuel activities. Even if a marketer has previously notified the department of his dangerous waste management activities and obtained an EPA/state identification number, he must renotify to identify his dangerous waste fuel activities.

(c) Storage.
(i) For short term accumulation by generators who are marketers of dangerous waste fuel, the applicable provisions of WAC 173-303-200 or 173-303-201;
(ii) For all marketers who store dangerous waste fuel, the applicable storage provisions of:
(A) WAC 173-303-280 through 173-303-395;
(B) WAC 173-303-420; and
(C) WAC 173-303-800 through 173-303-840;
(iii) For marketers with interim status permits who store dangerous waste fuel, the applicable storage provisions of WAC 173-303-400 including Subparts F through L of 40 CFR Part 265;
(iv) For marketers with final status permits who store dangerous waste fuel, the applicable storage provisions of:
(A) WAC 173-303-600 through 173-303-650; and
(B) WAC 173-303-660.
(d) Off-site shipment. The standards for generators in WAC 173-303-170 through 173-303-230 when a marketer initiates a shipment of dangerous waste fuel;
(e) Required notices.
(i) Before a marketer initiates the first shipment of dangerous waste fuel to a burner or another marketer, he must obtain a one-time written and signed notice from the burner or marketer certifying that:
(A) The burner or marketer has notified the department under WAC 173-303-060 and identified his waste-as-fuel activities; and
(B) If the recipient is a burner, the burner will burn the dangerous waste fuel only in an industrial furnace or boiler identified in subsection (2)(b) of this section.
(ii) Before a marketer accepts the first shipment of dangerous waste fuel from another marketer, he must provide the other marketer with a one-time written and signed certification that he has notified the department under WAC 173-303-060 and identified his dangerous waste fuel activities; and
(f) Recordkeeping. In addition to the applicable recordkeeping requirements of WAC 173-303-210 and 173-303-380, a marketer must keep a copy of each certification notice he receives or sends for three years from the date he last engages in a dangerous waste fuel marketing transaction with the person who sends or receives the certification notice.
(g) Standards applicable to burners of dangerous waste fuel.
Owners and operators of industrial furnaces and boilers identified in subsection (2)(b) of this section that burn dangerous fuel are "burners" and are subject to the following requirements:
(a) Prohibitions. The prohibitions under subsection (2)(b) of this section;
(b) Notification. Notification requirements under WAC 173-303-060 for dangerous waste fuel activities. Even if a burner has previously notified the department of his dangerous waste management activities and obtained an EPA/state identification number, he must renotify to identify his dangerous waste fuel activities.
(c) Storage.

WAC 173-303-515 Special requirements for used oil burned for energy recovery. (1) Applicability.
(a) This section applies to used oil that is burned for energy recovery in any boiler or industrial furnace that is not regulated under Subpart O of 40 CFR Part 265 or WAC 173-303-670, if such used oil:
(i) Exhibits any characteristic of a dangerous waste identified in WAC 173-303-090; or
(ii) Is designated as DW solely through WAC 173-303-084 or 173-303-101 through 173-303-103; or
(iii) Is designated solely as W001.
(b)(i) This section does not apply to used oil burned for energy recovery that is mixed with a listed waste (except as provided in (a)(iii) of this subsection) or that is designated as EHW through WAC 173-303-084 or 173-303-101 through 173-303-103. Such used oil is subject to the requirements of WAC 173-303-510.
(ii) Used oil containing more than 1000 ppm of total halogens is presumed to be a dangerous waste because it has been mixed with halogenated dangerous waste listed...
in WAC 173–303–9903 or 173–303–9904. Such dangerous wastes are subject to the requirements of WAC 173–303–510. Persons may rebut this presumption by demonstrating that the used oil does not contain dangerous waste (for example, by showing that the used oil does not contain significant concentrations of halogenated dangerous constituents listed in WAC 173–303–9905).

(iii) This section does not apply to used oil that is designated for any reason other than being listed as W001 if such used oil is burned for energy recovery by the generator of the used oil in his own marine or diesel engines.

(c) If a used oil subject to this section does not exceed any of the specifications of Table 1, it is subject only to the analysis and recordkeeping requirements under subsection (4)(b)(i) and (vi) of this section; otherwise, it is subject to all applicable provisions of this section.

(d) For the purposes of this chapter:

(i) "Used oil" means any oil that has been refined from crude oil, used, and, as a result of such use, is contaminated by physical or chemical impurities;

(ii) Used oil fuel includes any fuel produced from used oil by processing, blending, or other treatments;

(iii) Used oil fuel that exceeds any specification level (described in Table 1) is termed "off-specification used oil fuel."

### TABLE 1
**USED OIL EXCEEDING ANY SPECIFICATION LEVEL IS SUBJECT TO THIS SECTION WHEN BURNED FOR ENERGY RECOVERY**

<table>
<thead>
<tr>
<th>Constituent/property</th>
<th>Allowable level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic...............</td>
<td>5 ppm maximum</td>
</tr>
<tr>
<td>Cadmium................</td>
<td>2 ppm maximum</td>
</tr>
<tr>
<td>Chromium..............</td>
<td>10 ppm maximum</td>
</tr>
<tr>
<td>Lead....................</td>
<td>100 ppm maximum</td>
</tr>
<tr>
<td>Flash point............</td>
<td>100°F F minimum</td>
</tr>
<tr>
<td>Total halogens........</td>
<td>4,000 ppm maximum</td>
</tr>
<tr>
<td>Polychlorinated Biphenyls</td>
<td>2 ppm maximum</td>
</tr>
</tbody>
</table>

*The specification does not apply to used oil fuel mixed with a dangerous waste other than small quantity generator dangerous waste.

*Used oil containing more than 1,000 ppm total halogens is presumed to be a dangerous waste under the rebuttable presumption provided under WAC 173–303–515 (1)(b)(ii). Such used oil is subject to WAC 173–303–510 rather than this section when burned for energy recovery unless the presumption of mixing can be successfully rebutted.

(2) Prohibitions.

(a) A person may market off-specification used oil for energy recovery only:

(i) To burners or other marketers who have notified the department of their used oil management activities stating the location and general description of such activities, and who have an EPA/state identification number; and

(ii) To burners who burn the used oil in an industrial furnace or boiler identified in (b) of this subsection.

(b) Off-specification used oil may be burned for energy recovery in only the following devices:

(i) Industrial furnaces identified in WAC 173–303–040; or

(ii) Boilers, as defined in WAC 173–303–040 that are identified as follows:

(A) Industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes;

(B) Utility boilers used to produce electric power, steam, or heated or cooled air or other gases or fluids for sale; or

(C) Used oil-fired space heaters provided that:

(I) The heater burns only used oil that the owner or operator generates or used oil received from do-it-yourself oil changers who generate used oil as household waste;

(II) The heater is designed to have a maximum capacity of not more than 0.5 million Btu per hour; and

(III) The combustion gases from the heater are vented to the ambient air.

(3) Standards applicable to generators of used oil burned for energy recovery.

(a) Except as provided in (b) and (c) of this subsection generators of used oil are not subject to this section.

(b) Generators who market used oil directly to a burner are subject to subsection (4) of this section.

(c) Generators who burn used oil are subject to subsection (5) of this section.

(4) Standards applicable to marketers of used oil burned for energy recovery.

(a) Persons who market used oil fuel are termed "marketers." However, the following persons are not marketers subject to this section:

(i) Used oil generators, and collectors who transport used oil received only from generators, unless the generator or collector markets the used oil directly to a person who burns it for energy recovery. However, persons who burn some used oil fuel for purposes of processing or other treatment to produce used oil fuel for marketing are considered to be burning incidentally to processing. Thus, generators and collectors who market to such incidental burners are not marketers subject to this section;

(ii) Persons who market only used oil fuel that meets the specification under Table 1 of subsection (1) of this section and who are not the first person to claim the oil meets the specification (i.e., marketers who do not receive used oil from generators or initial transporters and marketers who neither receive nor market off-specification used oil fuel).

(b) Marketers are subject to the following requirements:

(i) Analysis of used oil fuel. Used oil fuel is subject to regulation under this section unless the marketer obtains analyses or other information documenting that the used
oil fuel meets the specification provided under Table 1 of subsection (1) of this section.

(ii) Prohibitions. The prohibitions under subsection (2)(a) of this section;

(iii) Notification. Notification to the department stating the location and general description of used oil management activities. Even if a marketer has previously notified the department of his dangerous waste management activities under WAC 173-303-060 and obtained an EPA/state identification number, he must renotify to identify his used oil management activities.

(iv) Invoice system. When a marketer initiates a shipment of off-specification used oil, he must prepare and send the receiving facility an invoice containing the following information:

(A) An invoice number;
(B) His own EPA/state identification number and the EPA/state identification number of the receiving facility;
(C) The names and addresses of the shipping and receiving facilities;
(D) The quantity of off-specification used oil to be delivered;
(E) The date(s) of shipment or delivery; and
(F) The following statement: "This used oil subject to Washington state department of ecology regulation under WAC 173-303-515;

Note: Used oil that meets the definition of combustible liquid (flash point below 200°F but at or greater than 100°F) or flammable liquid (flash point below 100°F) is subject to Department of Transportation Hazardous Materials Regulations at 49 CFR Parts 100-177.

(v) Required notices.

(A) Before a marketer initiates the first shipment of off-specification used oil to a burner or other marketer, he must obtain a one-time written and signed notice from the burner or marketer certifying that:

(I) The burner or marketer has notified the department stating the location and general description of his used oil management activities; and

(II) If the recipient is a burner, the burner will burn the off-specification used oil only in an industrial furnace or boiler identified in subsection (2)(b) of this section; and

(B) Before a marketer accepts the first shipment of off-specification used oil from another marketer subject to the requirements of this subsection, he must provide the marketer with a one-time written and signed notice certifying that he has notified the department of his used oil management activities; and

(vi) Recordkeeping.

(A) Used oil fuel that meets the specification. A marketer who first claims under (b)(i) of this subsection that used oil fuel meets the specification must keep copies of analysis (or other information used to make the determination) of used oil for three years. Such marketers must also record in an operating log and keep for three years the following information on each shipment of used oil fuel that meets the specification. Such used oil fuel is not subject to further regulation, unless it is subsequently mixed with dangerous waste or unless it is mixed with used oil so that it no longer meets the specification.

(I) The name and address of the facility receiving the shipment;

(II) The quantity of used oil fuel delivered;

(III) The date of shipment or delivery; and

(A) A cross-reference to the record of used oil analysis (or other information used to make the determination that the oil meets the specification) required under (b)(vi)(A) of this subsection.

(B) Off-specification used oil fuel. A marketer who receives or initiates an invoice under the requirements of this section must keep a copy of each invoice for three years from the date the invoice is received or prepared. In addition, a marketer must keep a copy of each certification notice that he receives or sends for three years from the date he last engages in an off-specification used oil fuel marketing transaction with the person who sends or receives the certification notice.

(5) Standards applicable to burners of used oil burned for energy recovery.

Owners and operators of facilities that burn used oil fuel are "burners" and are subject to the following requirements:

(a) Prohibition. The prohibition under subsection (2)(b) of this section;

(b) Notification. Burners of off-specification used oil must notify the department stating the location and general description of used oil management activities, except that owners and operators of used oil-fired space heaters that burn used oil fuel under the provisions of subsection (2)(b)(ii) of this section are exempt from these notification requirements. Even if a burner has previously notified the department of his dangerous waste management activities under WAC 173-303-060 and obtained an identification number, he must renotify to identify his used oil management activities.

(c) Required notices. Before a burner accepts the first shipment of off-specification used oil fuel from a marketer, he must provide the burner a one-time written and signed notice certifying that:

(i) He has notified the department stating the location and general description of his used oil management activities; and

(ii) He will burn the used oil only in an industrial furnace or boiler identified in subsection (2)(b) of this section; and

(d) Used oil fuel analysis.

(i) Used oil fuel burned by the generator is subject to regulation under this section unless the burner obtains analysis (or other information) documenting that the used oil meets the specification provided under Table 1 of subsection (1) of this section.

(ii) Burners who treat off-specification used oil fuel by processing, blending, or other treatment to meet the specification provided under Table 1 of subsection (1) of this section must obtain analyses (or other information) documenting that the used oil meets the specification.

(e) Recordkeeping. A burner who receives an invoice under the requirements of this section must keep a copy of each invoice for three years from the date the invoice
WAC 173-303-520 Special requirements for reclaiming spent lead acid battery wastes. This section applies to persons who reclaim spent lead-acid batteries that are recyclable materials ("spent batteries").

(1) Persons who generate, transport, or who store spent batteries but do not reclaim them are subject only to the requirements of WAC 173-303-050, 173-303-145 and 173-303-960 if such spent batteries are going to a batteryclaimer.

(2) Owners and operators of battery reclaiming facilities that store spent lead acid batteries prior to reclaiming them are subject to the following requirements:

(a) For all reclaimers, the applicable storage provisions of:

(i) WAC 173-303-280 (2) and (3);

(ii) WAC 173-303-283;

(iii) WAC 173-303-290;

(iv) WAC 173-303-310 through 173-303-360;

(v) WAC 173-303-380;

(vi) WAC 173-303-390 (2) and (3);

(vii) WAC 173-303-395;

(viii) WAC 173-303-420; and

(ix) WAC 173-303-800 through 173-303-840.

(b) For reclaimers with interim status permits, the applicable storage provisions of WAC 173-303-400 including Subparts F through L of 40 CFR Part 265;

(c) For reclaimers with final facility permits, the applicable storage provisions of:

(i) WAC 173-303-600 through 173-303-650; and

(ii) WAC 173-303-660.

WAC 173-303-550 Special requirements for facilities managing special waste. (1) Purpose. Special wastes (as defined in WAC 173-303-040(107)) pose less risk to public health and the environment than do other dangerous wastes, therefore, they do not require as high a level of regulation. The purpose of WAC 173-303-550 through 173-303-560 is to set forth those mandatory standards which are minimally acceptable for managing special waste, and the criteria and selective standards which will be applied based on the specific risks posed by such wastes.

(2) Applicability. The requirements of WAC 173-303-550 through 173-303-560 apply to owners and operators of facilities which manage special waste, and are only applicable to such special wastes as are being managed. Whenever a special waste is shipped from a facility, the owner or operator must comply with WAC 173-303-170 through 173-303-230, requirements for generators.

(3) Standards. The owner/operator of a facility managing moderate risk wastes must comply with all applicable standards of this chapter unless he requests (as described in subsection (4) of this section) and the department approves (as described in subsection (5) of this section) the application of less stringent standards to his facility. The owner/operator may request relief from any standards except those minimum standards specified in WAC 173-303-560. Failure to comply with an approval issued by the department pursuant to subsection (5) of this section, will be a violation of this chapter. Failure to comply with all applicable requirements of this chapter while the department is considering a request or after a request has been denied will be a violation of this chapter.

(4) Request. The owner/operator may request that less stringent standards be applied to his special waste management activities in any manner or form that he chooses. His request must be submitted in writing to the department, and must include:

(a) The facility name, EPA/state identification #, address, telephone number, and a contact person at the facility;

(b) The special waste(s) managed at the facility and the type(s) of management applied to them;

(c) The specific standards from which the owner/operator seeks relief;

(d) A description, for each standard, demonstrating:

(i) Why the owner/operator believes the standard to be unnecessary;

(ii) How public health and the environment will continue to be protected if the standard is not applied to the facility;

(iii) Any evidence supporting the contention that public health and the environment will be adequately protected if the standard is not applied (e.g., test data, diagrams, experiences at similar facilities, records, reports, etc.); and

(e) The following certification, signed and dated by a person who would be authorized to sign a report under WAC 173-303-810 (12)(b):

'I certify under penalty of law that I have personally examined and am familiar with the information submitted in this request and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false

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(2) The final facility standards apply to owners and operators of all facilities which treat, store or dispose of dangerous waste, and which are not exempted by subsection (3) of this section.

(3) The final facility standards do not apply to:

(a) Persons whose disposal activities are permitted under the Marine Protection, Research and Sanctuaries Act, except that storage, or treatment facilities where dangerous waste is loaded onto an ocean vessel for incineration or disposal at sea are subject to final facility standards;

(b) Persons whose disposal activities are permitted under the underground injection control program of the Safe Drinking Water Act, except that storage, or treatment facilities needed to handle dangerous wastes are subject to final facility standards;

(c) Owners or operators of POTWs which treat, store, or dispose of dangerous waste provided they follow the permit—by—rule requirement of WAC 173–303–802(4);

(d) A generator accumulating waste on site in compliance with WAC 173–303–200;

(e) The owner or operator of a facility which is permitted to manage solid waste pursuant to chapter 173–304 WAC, if the only dangerous waste the facility manages is excluded from regulation under this chapter by WAC 173–303–070(8);

(f) A farmer disposing of waste pesticides from his own use provided he complies with WAC 173–303–160 (2)(b);

(g) A transporter storing a manifested shipment of dangerous waste for ten days or less in accordance with WAC 173–303–240(5);

(h) Any person, other than an owner or operator who is already subject to the final facility standards, who is carrying out an immediate or emergency response to contain or treat a discharge or potential discharge of a dangerous waste or hazardous substance;

(i) The owner or operator of a facility which is in compliance with the interim status requirements of WAC 173–303–400 and 173–303–803, until final administrative disposition of his final facility permit;

(j) The owner or operator of a totally enclosed treatment facility or elementary neutralization or wastewater treatment unit as defined in WAC 173–303–040, provided that he complies with the permit by rule requirements of WAC 173–303–802(5); and

(k) The addition, by a generator, of absorbent material to waste in a container, or of waste to absorbent material in a container, provided that these actions occur at the time the waste is first placed in containers and the generator complies with WAC 173–303–200 (1)(b) and 173–303–395 (1)(a) and (b).
(4) The owner or operator of a final status TSD facility which manages special waste may comply with the special requirements selected under WAC 173-303-550 through 173-303-560 in lieu of the final facility standards of WAC 173-303-600 through 173-303-670, but only for those special wastes which he manages and only after the department has issued or modified his final facility permit in accordance with WAC 173-303-800 through 173-303-840 to incorporate the special requirements.

(5) The owner or operator of a facility which recycles dangerous waste may, for such recycled wastes only, comply with the applicable recycling standards specified in WAC 173-303-120 and 173-303-500 through 173-303-525 in lieu of the final facility standards.

(6) The owner or operator must comply with the special land disposal restrictions for certain dangerous wastes in WAC 173-303-140.

[Statutory Authority: Chapter 70.105 RCW. 88-18-083 (Order 88-29), § 173-303-600, filed 9/6/88; 88-07-019 (Order 87-37), § 173-303-600, filed 3/11/88; 87-14-029 (Order DE-87-4), § 173-303-600, filed 6/26/87; 86-12-057 (Order DE-85-10), § 173-303-600, filed 6/3/86; 84-09-088 (Order DE 83-36), § 173-303-600, filed 4/18/84. Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-600, filed 2/10/82.]

WAC 173-303-610 Closure and postclosure. (1) Applicability.

(a) Subsections (2) to (6) of this section, (which concern closure), apply to the owners and operators of all dangerous waste facilities.

(b) Subsections (7) to (10) of this section, (which concern postclosure care), apply to the owners and operators of all regulated units (as defined in WAC 173-303-040(75)) at which dangerous waste will remain after closure, to surface impoundments and waste piles as specified in WAC 173-303-650(6) and 173-303-660(9), and, unless otherwise authorized by the department, to the owners and operators of all facilities which, at closure, cannot meet the removal or decontamination limits specified in subsection (2)(b) of this section.

(c) For the purposes of the closure and postclosure requirements, any portion of a facility which closes is subject to the applicable closure and postclosure standards even if the rest of the facility does not close and continues to operate.

(2) Closure performance standard. The owner or operator must close the facility in a manner that:

(a)(i) Minimizes the need for further maintenance;

(ii) Controls, minimizes or eliminates to the extent necessary to protect human health and the environment, postclosure escape of dangerous waste, dangerous constituents, leachate, contaminated run-off, or dangerous waste decomposition products to the ground, surface water, ground water, or the atmosphere; and

(iii) Returns the land to the appearance and use of surrounding land areas to the degree possible given the nature of the previous dangerous waste activity.

(b) Where the closure requirements of this section, or of WAC 173-303-630(10), 173-303-640(5), 173-303-650(6), 173-303-655(8), 173-303-660(9), or 173-303-670(8) call for the removal or decontamination of dangerous wastes, waste residues, or equipment, bases, liners, soils or other materials containing or contaminated with dangerous wastes or waste residues, then such removal or decontamination must assure that the levels of dangerous waste or dangerous waste constituents or residues do not exceed:

(i) Background environmental levels, for any dangerous waste, managed at the facility, which either is listed under WAC 173-303-081 or 173-303-082 or is designated by the characteristics of WAC 173-303-090; and

(ii) At least the designation limits of WAC 173-303-084, or 173-303-101 through 173-303-103 for any dangerous waste, managed at the facility, which is not listed under WAC 173-303-081 or 173-303-082 and is not designated by the characteristics of WAC 173-303-090. In addition to these limits, the department may specify in the closure plan for a facility any lower limits for removal or decontamination which the department deems appropriate.

(3) Closure plan; amendment of plan.

(a) The owner or operator of a dangerous waste management facility must have a written closure plan. In addition, certain surface impoundments and waste piles from which the owner or operator intends to remove or decontaminate the dangerous waste at partial or final closure are required by WAC 173-303-650(6) and 173-303-660(9) to have contingent closure plans. The plan must be submitted with the permit application, in accordance with WAC 173-303-806(4), and approved by the department as part of the permit issuance procedures under WAC 173-303-840. The approved closure plan will become a condition of any permit. The department's decision must assure that the approved closure plan is consistent with subsections (2), (3), (4), (5), and (6) of this section, and the applicable requirements of WAC 173-303-630(10), 173-303-640(5), 173-303-650(6), 173-303-655(8), 173-303-660(9), 173-303-665(6), and 173-303-670(8). A copy of the approved plan and all revisions to the plan must be furnished to the department upon request, including request by mail until final closure is completed and certified in accordance with subsection (6) of this section. The plan must identify steps necessary to perform partial and/or final closure of the facility at any point during its active life. The closure plan must include at least:

(i) A description of how each dangerous waste management unit at the facility will be closed in accordance with subsection (2) of this section;

(ii) A description of how final closure of the facility will be conducted in accordance with subsection (2) of this section. The description must identify the maximum extent of the operation which will be unclosed during the active life of the facility;

(iii) An estimate of the maximum inventory of dangerous wastes ever on-site over the active life of the facility. (Any change in this estimate is a minor modification under WAC 173-303-830(4));

(iv) A detailed description of the methods to be used during partial closures and final closure, including, but not limited to, methods for removing, transporting,
treated, storing, or disposing of all dangerous wastes, and identification of the type(s) of the off-site dangerous waste management units to be used, if applicable;

(v) A detailed description of the steps needed to remove or decontaminate all dangerous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure, including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination required to satisfy the closure performance standard;

(vi) A detailed description of other activities necessary during the closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, ground water monitoring, leachate collection, and run-on and run-off control; and

(vii) A schedule for closure of each dangerous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each dangerous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure. (For example, in the case of a landfill unit, estimates of the time required to treat or dispose of all dangerous waste inventory and of the time required to place a final cover must be included.) Additionally, for facilities that use trust funds to establish financial assurance under WAC 173-303-620 (4) or (6) and that are expected to close prior to the expiration of the permit, an estimate of the expected year of final closure.

(b) The owner or operator must submit a written request for a permit modification to authorize a change in operating plans, facility design, or the approved closure plan in accordance with the procedures in WAC 173-303-800 through 173-303-840. The written request must include a copy of the amended closure plan for approval by the department.

(i) The owner or operator may submit a written request to the department for a permit modification to amend the closure plan at any time prior to the notification of partial or final closure of the facility.

(ii) The owner or operator must submit a written request for a permit modification to authorize a change in the approved closure plan whenever:

(A) Changes in operating plans or facility design affect the closure plan; or

(B) There is a change in the expected year of closure, if applicable; or

(C) In conducting partial or final closure activities, unexpected events require a modification of the approved closure plan.

(iii) The owner or operator must submit a written request for a permit modification including a copy of the amended closure plan for approval at least sixty days prior to the proposed change in facility design or operation, or no later than sixty days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator must request a permit modification no later than thirty days after the unexpected event. An owner or operator of a surface impoundment or waste pile that intends to remove all dangerous waste at closure and is not otherwise required to prepare a contingent closure plan under WAC 173-303-650(6) or 173-303-660(9), must submit an amended closure plan to the department no later than sixty days from the date that the owner or operator or department determines that the dangerous waste management unit must be closed as a landfill, subject to the requirements of WAC 173-303-665, or no later than thirty days from that date if the determination is made during partial or final closure. The department will approve, disapprove, or modify this amended plan in accordance with the procedures in WAC 173-303-800 through 173-303-840. The approved closure plan will become a condition of any permit issued.

(iv) The department may request modifications to the plan under the conditions described in (b)(ii) of this subsection. The owner or operator must submit the modified plan within sixty days of the department's request, or within thirty days if the change in facility conditions occurs during partial or final closure. Any modifications requested by the department will be approved in accordance with the procedures in WAC 173-303-800 through 173-303-840.

(c) Notification of partial closure and final closure.

(i) The owner or operator must notify the department in writing at least sixty days prior to the date on which he expects to begin closure of a surface impoundment, waste pile, land treatment, or landfill unit, or final closure of a facility with such a unit. The owner or operator must notify the department in writing at least forty-five days prior to the date on which he expects to begin final closure of a facility with only treatment or storage tanks, container storage, or incinerator units to be closed.

(ii) The date when he "expects to begin closure" must be either no later than thirty days after the date on which any dangerous waste management unit receives the known final volume of dangerous wastes or, if there is a reasonable possibility that the dangerous waste management unit will receive additional dangerous wastes, no later than one year after the date on which the unit received the most recent volume of dangerous waste. If the owner or operator of a dangerous waste management unit can demonstrate to the department that the dangerous waste management unit or facility has the capacity to receive additional dangerous wastes and he has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the department may approve an extension to this one-year limit.

(iii) If the facility's permit is terminated, or if the facility is otherwise ordered, by judicial decree or final order to cease receiving dangerous wastes or to close, then the requirements of (c) of this subsection do not apply. However, the owner or operator must close the facility in accordance with the deadlines established in subsection (4) of this section.
(iv) Removal of wastes and decontamination or dismantling of equipment. Nothing in this subsection shall preclude the owner or operator from removing dangerous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

(4) Closure; time allowed for closure.

(a) Within ninety days after receiving the final volume of dangerous wastes at a dangerous waste management unit or facility, the owner or operator must treat, remove from the unit or facility, or dispose of on site, all dangerous wastes in accordance with the approved closure plan. The department may approve a longer period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that he has taken and will continue to take all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, and either:

(i) The activities required to comply with this paragraph will, of necessity, take longer than ninety days to complete; or

(ii)(A) The dangerous waste management unit or facility has the capacity to receive additional dangerous wastes;

(B) There is a reasonable likelihood that he or another person will recommence operation of the dangerous waste management unit or the facility within one year; and

(C) Closure of the dangerous waste management unit or facility would be incompatible with continued operation of the site.

(b) The owner or operator must complete partial and final closure activities in accordance with the approved closure plan and within one hundred eighty days after receiving the final volume of dangerous wastes at the dangerous waste management unit or facility. The department may approve an extension to the closure period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that he has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but not operating dangerous waste management unit subject to postclosure care requirements in WAC 173-303-610 through 173-303-770.

(5) Disposal or decontamination of equipment, structures and soils. During the partial and final closure periods, all contaminated equipment, structures and soils must be properly disposed of or decontaminated unless otherwise specified in WAC 173-303-610(6), 173-303-655(8), 173-303-660(9), 173-303-665(6). By removing any dangerous wastes or dangerous constituents during partial and final closure, the owner or operator may become a generator of dangerous waste and must handle that waste in accordance with all applicable requirements of WAC 173-303-170 through 173-303-230.

(6) Certification of closure. Within sixty days of completion of closure of each dangerous waste surface impoundment, waste pile, land treatment, and landfill unit, and within sixty days of the completion of final closure, the owner or operator must submit to the department by registered mail, a certification that the dangerous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification must be signed by the owner or operator and by an independent registered professional engineer. Documentation supporting the independent registered professional engineer’s certification must be furnished to the department upon request until it releases the owner or operator from the financial assurance requirements for closure under WAC 173-303-620(4).

(7) Postclosure care and use of property.

(a) Postclosure care for each dangerous waste management unit subject to postclosure requirements must begin after completion of closure of the unit and continue for thirty years after that date and must consist of at least the following:

(i) Ground water monitoring and reporting as applicable; and

(ii) Maintenance and monitoring of waste containment systems as applicable.

(b) Any time preceding partial closure of a dangerous waste management unit subject to postclosure care requirements or final closure, or any time during the postclosure period for a particular unit, the department may, in accordance with the permit modification procedures in WAC 173-303-800 through 173-303-840:

(i) Shorten the postclosure care period applicable to the dangerous waste management unit, or facility, if all disposal units have been closed, if it finds that the reduced period is sufficient to protect human health and the environment (e.g., leachate or ground water monitoring results, characteristics of the dangerous waste, application of advanced technology, or alternative disposal, treatment, or reuse techniques indicate that the dangerous waste management unit or facility is secure); or
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(ii) Extend the postclosure care period applicable to the dangerous waste management unit or facility if it finds that the extended period is necessary to protect human health and the environment (e.g., leachate or ground water monitoring results indicate a potential for migration of dangerous waste at levels which may be harmful to human health and the environment).

(c) The department may require, at partial or final closure, continuation of any of the security requirements of WAC 173–303–310 during part or all of the postclosure period when:

(i) Dangerous wastes may remain exposed after completion of partial or final closure; or

(ii) Access by the public or domestic livestock may pose a hazard to human health.

(d) Postclosure use of property on or in which dangerous wastes remain after partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of any containment system, or the function of the facility’s monitoring systems, unless the department finds that the disturbance:

(i) Is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

(ii) Is necessary to reduce a threat to human health or the environment.

(e) All postclosure care activities must be in accordance with the provisions of the approved postclosure plan as specified in subsection (8) of this section.

(8) Postclosure plan; amendment of plan.

(a) The owner or operator of a dangerous waste disposal unit must have a written postclosure plan. In addition, certain piles and certain surface impoundments from which the owner or operator intends to remove or decontaminate the dangerous wastes at partial or final closure are required by WAC 173–303–650 and 173–303–660, respectively, to have written contingent postclosure plans. Owners or operators of surface impoundments and waste piles not otherwise required to prepare contingent postclosure plans must submit a postclosure plan to the department within ninety days from the date that the owner or operator determines that the dangerous waste management unit must be closed as a landfill, subject to the postclosure requirements. The plan must be submitted with the permit application, in accordance with WAC 173–303–806, and approved by the department as part of the permit issuance procedures under WAC 173–303–840. The approved postclosure plan will become a condition of any permit issued.

(b) For each dangerous waste management unit subject to the requirements of this subsection, the postclosure plan must identify the activities which will be carried on after closure and the frequency of these activities, and include at least:

(i) A description of the planned ground water monitoring activities and frequencies at which they will be performed;

(ii) A description of the planned maintenance activities, and frequencies at which they will be performed, to ensure:

(A) The integrity of the cap and final cover or other containment structures where applicable; and

(B) The function of the facility monitoring equipment;

(iii) And the name, address, and phone number of the person or office to contact about the dangerous waste disposal unit or facility during the postclosure care period.

(c) Until final closure of the facility, a copy of the approved postclosure plan must be furnished to the department upon request, including request by mail. After final closure has been certified, the department will approve, disapprove, or modify this plan in accordance with the procedures in WAC 173–303–840. The written request must include a copy of the amended postclosure plan for approval by the department.

(i) The owner or operator may submit a written request to the department for a permit modification to amend the postclosure plan at any time during the active life of the facility or during the postclosure care period.

(ii) The owner or operator must submit a written request for a permit modification to authorize a change in the approved postclosure plan whenever:

(A) Changes in operating plans or facility design affect the approved postclosure plan; or

(B) There is a change in the expected year of final closure, if applicable; or

(C) Events which occur during the active life of the facility, including partial and final closures, affect the approved postclosure plan.

(iii) The owner or operator must submit a written request for a permit modification at least sixty days prior to the proposed change in facility design or operation, or no later than sixty days after an unexpected event has occurred which has affected the postclosure plan. An owner or operator of a surface impoundment or waste pile that intends to remove all dangerous waste at closure and is not otherwise required to submit a contingent postclosure plan under WAC 173–303–650 or 173–303–660 must submit a postclosure plan to the department no later than ninety days after the date that the owner or operator or department determines that the dangerous waste management unit must be closed as a landfill, subject to the requirements of WAC 173–303–665. The department will approve, disapprove, or modify this plan in accordance with the procedures in WAC 173–303–800 through 173–303–840. The approved postclosure plan will become a permit condition.

(iv) The department may request modifications to the plan under the conditions described in (d)(ii) of this subsection. The owner or operator must submit the modified plan no later than sixty days after the department’s request, or no later than ninety days if the unit is
a surface impoundment or waste pile not previously required to prepare a contingent postclosure plan. Any modifications requested by the department will be approved, disapproved, or modified in accordance with the procedures in WAC 173-303-800 through 173-303-840.

(9) Notice to local land authority. No later than the submission of the certification of closure of each dangerous waste disposal unit, the owner or operator of a disposal facility must submit to the local zoning authority or the authority with jurisdiction over local land use and to the department a survey plat indicating the location and dimensions of landfill cells or other dangerous waste disposal units with respect to permanently surveyed benchmarks. This plat must be prepared and certified by a professional land surveyor. The plat filed with the local zoning authority or the authority with jurisdiction over local land use must contain a note, prominently displayed, which states the owner's or operator's obligation to restrict disturbance of the dangerous waste disposal unit in accordance with the applicable requirements of this section. In addition, no later than sixty days after certification of closure of each dangerous waste disposal unit, the owner or operator must submit to the local zoning authority or the authority with jurisdiction over local land use and to the department, a record of the type, location, and quantity of dangerous wastes disposed of within each cell or other disposal unit of the facility. For wastes disposed of before November 19, 1980 (March 12, 1982, for facilities subject to this chapter but not subject to 40 CFR Part 264), the owner or operator must identify the type, location, and quantity of the dangerous wastes to the best of his knowledge and in accordance with any records he has kept.

(10) Notice in deed to property.

(a) No later than sixty days after certification of closure of each dangerous waste disposal unit, the owner or operator must submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the department a record of the type, location, and quantity of dangerous wastes disposed of within each cell or other disposal unit of the facility. For hazardous wastes (as defined in WAC 173-303-040(39)) disposed of before January 12, 1981, the owner or operator must identify the type, location, and quantity of the dangerous wastes to the best of his knowledge and in accordance with any records he has kept.

(b) Within sixty days of certification of closure of the first dangerous waste disposal unit and within sixty days of certification of closure of the last dangerous waste disposal unit, the owner or operator must:

(i) Record, in accordance with state law, a notation on the deed to the facility property, or on some other instrument which is normally examined during title search, that will in perpetuity notify any potential purchaser of the property that:

(A) The land has been used to manage dangerous wastes;

(B) Its use is restricted under this section; and

(C) The survey plat and record of the type, location, and quantity of dangerous wastes disposed of within each cell or other dangerous waste disposal unit of the facility required in subsection (9) of this section have been filed with the local zoning authority, or the authority with jurisdiction over local land use, and with the department; and

(ii) Submit a certification, signed by the owner or operator, that he has recorded the notation specified in (b)(i) of this subsection, including a copy of the document in which the notation has been placed, to the department.

(c) If the owner or operator or any subsequent owner of the land upon which a dangerous waste facility was located wishes to remove dangerous wastes and dangerous waste residues, the liner, if any, or contaminated soils, he must request a modification to the postclosure permit in accordance with the applicable requirements in WAC 173-303-800 through 173-303-840. The owner or operator must demonstrate that the removal of dangerous wastes will satisfy the criteria of subsection (7)(d) of this section. By removing dangerous waste, the owner or operator may become a generator of dangerous waste and must manage it in accordance with all applicable requirements of this chapter. If he is granted a permit modification or otherwise granted approval to conduct such removal activities, the owner or operator may request that the department approve either:

(i) The removal of the notation on the deed to the facility property or other instrument normally examined during title search; or

(ii) The addition of a notation to the deed or instrument indicating the removal of the dangerous waste.

(11) Certification of completion of postclosure care. No later than sixty days after completion of the established postclosure care period for each dangerous waste disposal unit, the owner or operator must submit to the department, by registered mail, a certification that the postclosure care period for the dangerous waste disposal unit was performed in accordance with the specifications in the approved postclosure plan. The certification must be signed by the owner or operator and an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the department upon request until he releases the owner or operator from the financial assurance requirements for postclosure care under WAC 173-303-620(6).

[Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-610, filed 6/26/87; 84-14-031 (Order DE-84-22), § 173-303-610, filed 6/27/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-610, filed 2/10/82.]
and 173–303–660, respectively, require that such facilities comply with this section.

(c) States and the federal government are exempt from the requirements of this section, except that operators of facilities who are under contract with the state or federal government must meet the requirements of this section.

(2) Definitions. As used in this section, the following listed or referenced terms shall have the meanings given below:

(a) "Closure plan" means the plan for closure prepared in accordance with the requirements of WAC 173–303–610(3);

(b) "Current closure cost estimate" means the most recent of the estimates prepared in accordance with subsection (3) of this section;

(c) "Current postclosure cost estimate" means the most recent of the estimates prepared in accordance with subsection (5) of this section;

(d) "Parent corporation" means a corporation which directly owns at least fifty percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation;

(e) "Postclosure plan" means the plan for postclosure care prepared in accordance with the requirements of WAC 173–303–610 (7), (8), (9), and (10);

(f) "Regional administrator" means the department;

(g) "Hazardous waste" means dangerous waste; and

(h) The additional terms listed and defined in 40 CFR 264.141 (f) and (g) are adopted by reference.

(3) Cost estimate for facility closure.


(i) Must equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan (see WAC 173–303–610 (3)(a));

(ii) Must be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in subsection (2)(d) of this section.) The owner or operator may use costs for on-site disposal if he can demonstrate that on-site disposal capacity will exist at all times over the life of the facility;

(iii) May not incorporate any salvage value that may be realized with the sale of dangerous wastes, facility structures or equipment, land, or other assets associated with the facility at the time of partial or final closure; and

(iv) May not incorporate a zero cost for dangerous wastes that might have economic value.

(b) During the active life of the facility, the owner or operator must revise the closure cost estimate no later than thirty days after the department has approved the request to modify the closure plan, if the change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in (e)(i) and (ii) of this subsection.

(e) During the active life of the facility, the owner or operator must adjust the closure cost estimate for inflation within sixty days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with this section. For owners and operators using the financial test or corporate guarantee, the closure cost estimate must be updated for inflation within thirty days after the close of the firm's fiscal year and before submission of updated information to the department as specified in subsection (4) of this section. The adjustment may be made by recalculating the maximum costs of closure in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product as published by the United States Department of Commerce in its survey of current business. The inflation factor is the result of dividing the latest published annual deflator by the deflator for the previous year.

(i) The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.

(ii) Subsequent adjustments are made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.

(d) During the operating life of the facility, the owner or operator must keep at the facility the latest closure cost estimate no later than thirty days after the department approves the request to modify the closure plan, if the change in the estimate has been adjusted in accordance with (c) of this subsection, the latest adjusted closure cost estimate.

(4) Financial assurance for facility closure.

(a) An owner or operator of a TSD facility must establish financial assurance for closure of the facility. The owner or operator must choose from the following options or combination of options:

(i) Closure trust fund;

(ii) Surety bond guaranteeing payment into a closure trust fund;

(iii) Surety bond guaranteeing performance of closure;

(iv) Closure letter of credit;

(v) Closure insurance; or

(vi) Financial test and corporate guarantee for closure.

(b) In satisfying the requirements of financial assurance for facility closure in this subsection, the owner or operator shall meet all the requirements set forth in 40 CFR 264.143.

(5) Cost estimate for postclosure monitoring and maintenance.

(a) The owner or operator of a facility subject to postclosure monitoring or maintenance requirements must have a detailed written estimate, in current dollars, of the annual cost of postclosure monitoring and maintenance of the facility in accordance with the applicable
postclosure regulations in WAC 173–303–610 (7) through (10), 173–303–650(6), 173–303–655(8), 173–303–660(9), and 173–303–665(6). The postclosure cost estimate must be based on the costs to the owner or operator of hiring a third party to conduct postclosure care activities. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in subsection (2)(d) of this section.) The postclosure cost estimate is calculated by multiplying the annual postclosure cost estimate by the number of years of postclosure care required by WAC 173–303–610.

(b) During the active life of the facility, the owner or operator must revise the postclosure cost estimate within thirty days after the department has approved the request to modify the postclosure plan, if the change in the postclosure plan increases the cost of postclosure care. The revised postclosure cost estimate must be adjusted for inflation as specified in (c)(i) and (ii) of this subsection.

(c) During the active life of the facility, the owner or operator must adjust the postclosure cost estimate for inflation within sixty days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with subsection (6) of this section. For owners or operators using the financial test or corporate guarantee, the postclosure cost estimate must be updated for inflation within thirty days after the close of the firm's fiscal year and before the submission of updated information to the department as specified in subsection (6) of this section. The adjustment may be made by recalculating the postclosure cost estimate in current dollars or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product as published by the United States Department of Commerce in its Survey of Current Business. The inflation factor is the result of dividing the latest published annual deflator by the deflator for the previous year.

(i) The first adjustment is made by multiplying the postclosure cost estimate by the inflation factor. The result is the adjusted postclosure cost estimate.

(ii) Subsequent adjustments are made by multiplying the latest adjusted postclosure cost estimate by the latest inflation factor.

(d) During the operating life of the facility, the owner or operator must keep at the facility the latest postclosure cost estimate prepared in accordance with (a) and (b) of this subsection, and, when this estimate has been adjusted in accordance with (c) of this subsection, the latest adjusted postclosure cost estimate.

(6) Financial assurance for postclosure monitoring and maintenance.

(a) An owner or operator of a facility subject to postclosure monitoring or maintenance requirements must establish financial assurance for postclosure care in accordance with the approved postclosure care plan. He must choose from the following options or combination of options:

(i) Postclosure trust fund;

(ii) Surety bond guaranteeing payment into a postclosure trust fund;

(iii) Surety bond guaranteeing performance of postclosure care;

(iv) Postclosure letter of credit;

(v) Postclosure insurance; or

(vi) Financial test and corporate guarantee for postclosure care.

(b) In satisfying the requirements of financial assurance for facility postclosure care in this subsection, the owner or operator shall meet all the requirements set forth in 40 CFR 264.145.

(7) Use of a mechanism for financial assurance of both closure and postclosure care. An owner or operator may satisfy the requirements for financial assurance for both closure and postclosure care for one or more facilities by using a trust fund, surety bond, letter of credit, insurance, financial test, or corporate guarantee that meets the specifications for the mechanism in both 40 CFR 264.143 and 264.145. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for financial assurance of closure and of postclosure care.

(8) Liability requirements.

(a) An owner or operator of a TSD facility or a group of such facilities must demonstrate financial responsibility for bodily injury and property damages to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must meet the requirements of 40 CFR 264.147(a) or, when applicable, (f).

(b) An owner or operator of a facility with a regulated unit or units (as defined in WAC 173–303–040(75)) used to manage dangerous waste or a group of such facilities must demonstrate financial responsibility for bodily injury and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must meet the requirements of 40 CFR 264.147(b) or, when applicable, (f).

(c) Request for variance. If an owner or operator can demonstrate to the satisfaction of the department that the levels of financial responsibility required by (a) or (b) of this subsection are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the owner or operator may obtain a variance from the department. The request for a variance must be submitted to the department as part of the application under WAC 173–303–806(4) for a facility that does not have a permit, or pursuant to the procedures for permit modification under WAC 173–303–830 for a facility that has a permit. If granted, the variance will take the form of an adjusted level of required liability coverage, such level to be based on the department's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. The department may require an owner or operator who requests a variance to provide such technical and engineering information as is deemed necessary by the department to determine a level of financial responsibility other than that required.
by (a) or (b) of this subsection. Any request for a variance for a permitted facility will be treated as a request for a permit modification under WAC 173-303-830.

(d) Adjustments by the department. If the department determines that the levels of financial responsibility required by (a) or (b) of this subsection are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the department may adjust the level of financial responsibility required under (a) or (b) of this subsection as may be necessary to protect human health and the environment. This adjusted level will be based on the department's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. In addition, if the department determines that there is a significant risk to human health and the environment from non-sudden accidental occurrences resulting from the operations of a facility that has no regulated units (as defined in WAC 173-303-040(75)), it may require that the owner or operator of the facility comply with (b) of this subsection. An owner or operator must furnish to the department within a reasonable time, any information which the department requests to determine whether cause exists for such adjustments of level or type of coverage. Any adjustments of level or type of coverage for a facility that has a permit will be treated as a permit modification under WAC 173-303-830.

(e) Period of coverage. An owner or operator must continuously provide liability coverage for a facility as required by this subsection until certifications of closure of the facility, as specified in WAC 173-303-610(6), are received by the department.

(f) Incapacity of owners or operators, guarantor or financial institutions.

(a) An owner or operator must notify the department by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), United States Code, naming the owner or operator as debtor, within ten days after commencement of the proceeding. A guarantor of a corporate guarantee as specified in 40 CFR 264.143(f) and 264.145(f) must make such a notification if he is named as debtor, as required under the terms of the corporate guarantee (40 CFR 264.151(h)).

(b) An owner or operator who fulfills the requirements of 40 CFR 264.143, 264.145, or 264.147 (a) or (b) by obtaining a trust fund, surety bond, letter of credit, or insurance policy will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The owner or operator must establish other financial assurance or liability coverage within sixty days after such an event.

(10) Wording of the instruments. The financial instruments required by this section shall contain the wording specified by 40 CFR 264.151, except that:

(a) The words "regional administrator" and "environmental protection agency" must be replaced with the word "department";

(b) The words "hazardous waste" must be replaced with the words "dangerous waste";

(c) Any other words specified by the department shall be changed as necessary to assure financial responsibility of the facility in accordance with the requirements of this section.

Copies of the financial instruments with the appropriate word changes will be available from the department by June 30, 1984.

[Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-620, filed 6/26/87; 84-09-088 (Order DE-83-36), § 173-303-620, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.15 RCW. 82-03-023 (Order DE-81-33), § 173-303-620, filed 2/10/82. Formerly WAC 173-302-340.]

WAC 173-303-650 Surface impoundments. (1) Applicability. The regulations in this section apply to owners and operators of facilities that use surface impoundments to treat, store, or dispose of dangerous waste.

(2) Design and operating requirements.

(a)(i) A surface impoundment (except for an existing portion of a surface impoundment) must have a liner that is designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent subsurface soil or ground water or surface water at any time during the active life (including the closure period) of the impoundment. The liner may be constructed of materials that may allow wastes to migrate into the liner (but not into the adjacent subsurface soil or ground water or surface water) during the active life of the facility, provided that the impoundment is closed in accordance with subsection (6)(a)(i) of this section. For impoundments that will be closed in accordance with subsection (6)(a)(ii) of this section, the liner must be constructed of materials that can prevent wastes from migrating into the liner during the active life of the facility. The liner must be:

(A) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift;

(C) Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

(D) For EHW management, the owner or operator shall submit an engineering report with his permit application under WAC 173-303-806(4) stating the basis for selecting the liner(s). The report shall be certified by a licensed professional engineer.

(ii) The owner or operator of a new surface impoundment installed after October 31, 1984, and in which liquid EHW is managed must:

[1988 WAC Supp—page 491]
(A) Install a double lined system which incorporates the specifications of subsection (3)(a), (b), and (c) of this section; and

(B) Must comply with either the ground water monitoring requirements of WAC 173-303-645, or the unsaturated zone monitoring requirements of WAC 173-303-655(6).

(b) The owner or operator will be exempted from the requirements of (a) of this subsection, if the department finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, will prevent the migration of any dangerous constituents listed in WAC 173-303-9905, or which otherwise cause his wastes to be regulated under this chapter, into the ground water or surface water at any future time. In deciding whether to grant an exemption, the department will consider:

(i) The nature and quantity of the wastes;

(ii) The proposed alternate design and operation;

(iii) The hydrogeologic setting of the facility, including the attenuation capacity and thickness of the liners and soils present between the impoundment and ground water or surface water; and

(iv) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

(c) A surface impoundment must be designed, constructed, maintained, and operated to prevent overtopping resulting from normal or abnormal operations; overfilling; wind and wave action; rainfall; run-on; malfunctions of level controllers, alarms, and other equipment; and human error.

(d) A surface impoundment must be designed so that any flow of waste into the impoundment can be immediately shut off in the event of overtopping or liner failure.

(e) A surface impoundment must be designed to repel birds.

(f) A surface impoundment must have dikes that are designed, constructed, and maintained with sufficient structural integrity to prevent their failure. In ensuring structural integrity, it must not be presumed that the liner system will function without leakage during the active life of the unit.

(g) Earthen dikes must be kept free of:

(i) Perennial woody plants with root systems which could weaken its structural integrity; and

(ii) Burrowing mammals which could weaken its structural integrity or create leaks through burrows.

(h) Earthen dikes must have a protective cover, such as grass, shale or rock to minimize wind and water erosion and to preserve their structural integrity.

(i) The department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this subsection are satisfied.

(3) Double-lined surface impoundments; exemption from WAC 173-303-645, ground water protection requirements.

(a) Except as provided in subsection (2)(a)(ii) of this section, the owner or operator of a double-lined surface impoundment is not subject to regulation under WAC 173-303-645 if the following conditions are met:

(i) The impoundment (including its underlying liners) must be located entirely above the seasonal high water table;

(ii) The impoundment must be underlain by two liners which are designed and constructed in a manner that prevents the migration of liquids into or out of the space between the liners. Both liners must meet all the specifications of subsection (2)(a)(i) of this section;

(iii) A leak detection system must be designed, constructed, maintained, and operated between the liners to detect any migration of liquids into the space between the liners; and

(iv) A leachate detection, collection and removal system must be designed and operated to remove accumulated liquids from the system as quickly as possible so as to avoid unnecessary buildup of hydrostatic pressure in the system.

(b) If liquid leaks into the leak detection system, the owner or operator must:

(i) Notify the department of the leak in writing within seven days after detecting the leak; and

(ii)(A) Within a period of time specified in the permit, remove accumulated liquid, repair or replace the liner which is leaking to prevent the migration of liquids through the liner, and obtain a certification from a qualified engineer that, to the best of his knowledge and opinion, the leak has been stopped; or

(B) If a detection monitoring program pursuant to WAC 173-303-645(9) has already been established in the permit (to be complied with only if a leak occurs), begin to comply with that program and any other applicable requirements of WAC 173-303-645 within the period of time specified in the permit.

(c) The department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this section are satisfied.

(4) Monitoring and inspection.

(a) During construction and installation, liners (except in the case of existing portions of surface impoundments exempt from subsection (2)(a)(i) of this section) and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:

(i) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

(ii) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural nonuniformities that may cause an increase in the permeability of the liner or cover.

(b) While a surface impoundment is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

(i) Deterioration, malfunctions, or improper operation of overtopping control systems;

(ii) Sudden drops in the level of the impoundment's contents;
(iii) The presence of liquids in leak detection systems, where installed to comply with subsection (3) of this section; and

(iv) Severe erosion or other signs of deterioration in dikes or other containment devices.

(c) Prior to the issuance of a permit, and after any extended period of time (at least six months) during which the impoundment was not in service, the owner or operator must obtain a certification from a qualified engineer that the impoundment’s dike, including that portion of any dike which provides freeboard, has structural integrity. The certification must establish, in particular, that the dike:

(i) Will withstand the stress of the pressure exerted by the types and amounts of wastes to be placed in the impoundment; and

(ii) Will not fail due to scouring or piping, without dependence on any liner system included in the surface impoundment construction.

(5) Emergency repairs; contingency plans.

(a) A surface impoundment must be removed from service in accordance with (b) of this subsection when:

(i) Unexpected changes of liquid levels occur; or

(ii) The dike leaks.

(b) When a surface impoundment must be removed from service as required by (a) of this subsection, the owner or operator must:

(i) Immediately shut off the flow or stop the addition of wastes into the impoundment;

(ii) Immediately contain any surface leakage which has occurred or is occurring;

(iii) Immediately stop the leak;

(iv) Take any other necessary steps to stop or prevent catastrophic failure;

(v) Empty the impoundment, if a leak cannot be stopped by any other means; and

(vi) Notify the department of the problem in writing within seven days after detecting the problem.

(c) As part of the contingency plan required in WAC 173-303-340 through 173-303-360, the owner or operator must specify:

(i) A procedure for complying with the requirements of (b) of this subsection; and

(ii) A containment system evaluation and repair plan describing: Testing and monitoring techniques; procedures to be followed to evaluate the integrity of the containment system in the event of a possible failure; description of a schedule of actions to be taken in the event of a possible failure; and the repair techniques and materials (and their availability) to be used in the event of leakage due to containment system failure or deterioration which does not require the impoundment to be removed from service.

(d) No surface impoundment that has been removed from service in accordance with the requirements of this section may be restored to service unless the portion of the impoundment which was failing is repaired and the following steps are taken:

(i) If the impoundment was removed from service as the result of actual or imminent dike failure, the dike's structural integrity must be recertified in accordance with subsection (4)(c) of this section;

(ii) If the impoundment was removed from service as the result of a sudden drop in the liquid level, then:

(A) For any existing portion of the impoundment, a liner must be installed in compliance with subsection (2)(a)(i) or (3) of this section; and

(B) For any other portion of the impoundment, the repaired liner system must be certified by a qualified engineer as meeting the design specifications approved in the permit.

(e) A surface impoundment that has been removed from service in accordance with the requirements of this section and that is not being repaired must be closed in accordance with the provisions of subsection (6) of this section.

(6) Closure and post-closure care.

(a) At closure, the owner or operator must:

(i) Remove or decontaminate all dangerous waste and dangerous waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with dangerous waste and leachate, and manage them as dangerous waste; or

(ii) If the surface impoundment will be closed as a landfill, except that this option is prohibited if EHW would remain in the closed unit(s):

(A) Eliminate free liquids by removing liquid wastes or solidifying the remaining wastes and waste residues;

(B) Stabilize remaining wastes to a bearing capacity sufficient to support a final cover; and

(C) Cover the surface impoundment with a final cover designed and constructed to:

(I) Provide long-term minimization of the migration of liquids through the closed impoundment with a material that has a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present;

(II) Function with minimum maintenance;

(III) Promote drainage and minimize erosion or abrasion of the final cover; and

(IV) Accommodate settling and subsidence so that the cover's integrity is maintained.

(b) If some waste residues or contaminated materials are left in place at final closure (except that no EHW may ever be left in place), the owner or operator must comply with all post-closure requirements contained in WAC 173-303-610 (7), (8), (9), and (10), including maintenance and monitoring throughout the post-closure care period (specified in the permit). The owner or operator must:

(i) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;

(ii) Maintain and monitor the leak detection system in accordance with subsection (3) of this section, where such a system is present between double liner systems;

(iii) Maintain and monitor the ground water monitoring system and comply with all applicable requirements of WAC 173-303-643; and
(iv) Prevent run-on and run-off from eroding or otherwise damaging the final cover.

(c)(i) If an owner or operator plans to close a surface impoundment in accordance with (a)(i) of this subsection, and the impoundment does not comply with the liner requirements of subsection (2)(a)(i) of this section, and is not exempt from them in accordance with subsection (2)(b) of this section, then:

(A) The closure plan for the impoundment under WAC 173-303-610(3) must include both a plan for complying with (a)(i) of this subsection, and a contingent plan for complying with (a)(ii) of this subsection in case not all contaminated subsoils can be practicably removed at closure; and

(B) The owner or operator must prepare a contingent post-closure plan under WAC 173-303-610(8) for complying with (b) of this subsection in case not all contaminated subsoils can be practicably removed at closure.

(ii) The cost estimates calculated under WAC 173-303-620 (3) and (5) for closure and post-closure care of an impoundment subject to (c) of this subsection must include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under (a)(i) of this subsection.

(d) During the post-closure care period, if liquids leak into a leak detection system installed under subsection (3) of this section, the owner or operator must notify the department of the leak in writing within seven days after detecting the leak. The department will then modify the permit to require compliance with applicable requirements of WAC 173-303-645, or, if so requested by the owner or operator, to require removal of all materials in case not all contaminated subsoils can be practicably removed at closure.

(7) Special requirements for ignitable or reactive waste. Ignitable or reactive waste must not be placed in a surface impoundment, unless:

(a) The waste is treated, rendered, or mixed before or immediately after placement in the impoundment so that:

(i) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under WAC 173-303-090; and

(ii) WAC 173-303-395 (1)(b) is complied with; or

(b) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react; or

(c) The surface impoundment is used solely for emergencies.

(8) Special requirements for incompatible wastes. Incompatible wastes and materials must not be placed in the same surface impoundment, unless WAC 173-303-395 (1)(b) is complied with.

(9) Special requirements for dangerous wastes F020, F021, F022, F023, F026, and F027.

(a) The wastes F020, F021, F022, F023, F026, or F027 must not be placed in a surface impoundment unless the owner or operator operates the surface impoundment in accordance with a management plan for these wastes that is approved by the department pursuant to the standards set out in this subsection, and in accord with all other applicable requirements of this section. The factors to be considered are:

(i) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(ii) The attenuative properties of underlying and surrounding soils or other materials;

(iii) The mobilizing properties of other materials co-disposed with these wastes; and

(iv) The effectiveness of additional treatment, design, or monitoring techniques.

(b) The department may determine that additional design, operating, and monitoring requirements are necessary in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.


(a) The regulations in this section apply to owners and operators of facilities that store or treat dangerous waste in piles.

(b) The regulations in this section do not apply to owners or operators of waste piles that will be closed with wastes left in place. Such waste piles are subject to regulation under WAC 173-303-665 (Landfills).

(c) The owner or operator of any waste pile that is inside or under a structure that provides protection from precipitation so that neither run-off nor leachate is generated is not subject to regulation under subsection (2) of this section, or under WAC 173-303-645, provided that:

(i) Liquids or materials containing free liquids are not placed in the pile;

(ii) The pile is protected from surface water run-on by the structure or in some other manner;

(iii) The pile is designed and operated to control dispersal of the waste by wind, by means other than wetting; and

(iv) The pile will not generate leachate through decomposition or other reactions.

(d) All EHW and respiratory carcinogens stored in waste piles must be protected from dispersal by precipitation or wind (e.g., covered, stored inside a building, etc.).

(2) Design and operating requirements.

(a) A waste pile (except for an existing portion of a waste pile) must have:

(i) A liner that is designed, constructed, installed and maintained to prevent any migration of wastes out of the pile into the adjacent subsurface soil or ground water or surface water at any time during the active life (including the closure period) of the waste pile. The liner may
be constructed of materials that may allow waste to migrate into the liner itself (but not into the adjacent subsurface soil or ground water or surface water) during the active life of the facility. The liner must be:

(A) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(C) Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

(ii) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the pile. The department will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm (one foot). The leachate collection and removal system must be:

(A) Constructed of materials that are:

(I) Chemically resistant to the waste managed in the pile and to the leachate expected to be generated; and

(II) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying wastes, waste cover materials, and by any equipment used at the pile; and

(B) Designed and operated to function without clogging through the scheduled closure of the waste pile.

(b) A liner and leachate collection and removal system must be protected from plant growth which could adversely affect any component of the system.

(c) For EHW management, the owner or operator shall submit an engineering report with his permit application stating the basis for selecting the liner required in subsection (2)(a)(i) of this section. The statement shall be certified by a licensed professional engineer.

(d) The owner or operator will be exempted from the requirements of (a), (b), and (c) of this subsection, if the department finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, will prevent the migration of any dangerous constituents identified under WAC 173-303-645(4) into the ground water or surface water at any future time. In deciding whether to grant an exemption, the department will consider:

(i) The nature and quantity of the wastes;

(ii) The proposed alternate design and operation;

(iii) The hydrogeologic setting of the facility, including attenuative capacity and thickness of the liners and soils present between the pile and ground water or surface water; and

(iv) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

(e) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto any portion of the pile during peak discharge from at least a twenty-five-year storm.

(f) The owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a twenty-four-hour, twenty-five-year storm.

(g) Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously and in accordance with this chapter after storms to maintain design capacity of the system.

(h) If the pile contains any particulate matter which may be subject to wind dispersal, the owner or operator must cover or otherwise manage the pile to control wind dispersal.

(i) The department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this subsection are satisfied.

(3) Double-lined piles; exemption from WAC 173-303-645, ground water protection requirements.

(a) The owner or operator of a double-lined waste pile is not subject to regulation under WAC 173-303-645 if the following conditions are met:

(i) The pile (including its underlying liners) must be located entirely above the seasonal high water table;

(ii) The pile must be underlain by two liners which are designed and constructed in a manner that prevents the migration of liquids into or out of the space between the liners. Both liners must meet all the specifications of subsection (2)(a)(i) and (c) of this section;

(iii) A leak detection system must be designed, constructed, maintained, and operated between the liners to detect any migration of liquids into the space between the liners; and

(iv) The pile must have a leachate collection and removal system above the top liner that is designed, constructed, maintained, and operated in accordance with subsection (2)(a)(ii) of this section.

(b) If liquid leaks into the leak detection system, the owner or operator must:

(i) Notify the department of the leak in writing within seven days after detecting the leak; and

(ii)(A) Within the period of time specified in the permit, remove accumulated liquid, repair or replace the liner which is leaking to prevent the migration of liquids through the liner, and obtain a certification from a qualified engineer that, to the best of his knowledge and opinion, the leak has been stopped; or

(B) If a detection monitoring program pursuant to WAC 173-303-645(9) has already been defined in the permit (to be complied with only if a leak occurs), begin to comply with that program and any other applicable requirements of WAC 173-303-645 within the period of time specified in the permit.

(c) The department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this subsection are satisfied.

(4) Inspection of liners; exemption from WAC 173-303-645, ground water protection requirements.
(a) The owner or operator of a pile is not subject to regulation under WAC 173-303-645 if the following conditions are met:

(i) The pile (including its underlying liner) must be located entirely above the seasonal high water table;

(ii) The pile must be underlain by a liner (base) that meets all the specifications of subsection (2)(a)(i) of this section;

(iii) The wastes in the pile must be removed periodically, and the liner must be inspected for deterioration, cracks, or other conditions that may result in leaks. The frequency of inspection will be specified in the inspection plan required in WAC 173-303-320 and must be based on the potential for the liner (base) to crack or otherwise deteriorate under the conditions of operation;

(iv) The liner must be of sufficient strength and thickness to prevent failure due to puncture, cracking, tearing, or other physical damage from equipment used to place waste in or on the pile or to clean and expose the liner surface for inspection; and

(v) The pile must have a leachate collection and removal system above the liner that is designed, constructed, maintained, and operated in accordance with subsection (2)(a)(ii) of this section.

(b) If deterioration, cracking, or other condition is identified that is causing or could cause a leak, the owner or operator must:

(i) Notify the department of the condition in writing within seven days after detecting the condition; and

(ii) (A) Repair or replace the liner (base) and obtain a certification from a qualified engineer that, to the best of his knowledge and opinion, the liner (base) has been repaired and leakage will not occur; or

(B) If a detection monitoring program pursuant to WAC 173-303-645(9) has already been defined in the permit (to be complied with only if a leak occurs), begin to comply with that program and any other applicable requirements of WAC 173-303-645 within the period of time specified in the permit.

(c) The department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this subsection are satisfied.

(5) Monitoring and inspection.

(a) During construction or installation, liners (except in the case of existing portions of piles exempt from subsection (2)(a) of this section), and cover systems (e.g., membranes, sheets, coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, foreign materials). Immediately after construction or installation:

(i) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

(ii) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural nonuniformities that may cause an increase in the permeability of the liner or cover.

(b) While a waste pile is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

(i) Deterioration, malfunctions, or improper operation of run-on and run-off control systems;

(ii) The presence of liquids in leak detection systems, where installed to comply with subsection (3) of this section;

(iii) Proper functioning of wind dispersal control systems; and

(iv) The presence of leachate in and proper functioning of leachate collection and removal systems.

(6) Containment system repairs—Contingency plans.

(a) Whenever there is any indication of a possible failure of the containment system, that system must be inspected in accordance with the provisions of the containment system evaluation and repair plan required by subsection (d) of this subsection. Indications of possible failure of the containment system include liquid detected in the leachate detection system, evidence of leakage or the potential for leakage in the base, erosion of the base, or apparent or potential deterioration of the liner(s) based on observation or test samples of the liner materials.

(b) Whenever there is a positive indication of a failure of the containment system, the waste pile must be removed from service. Indications of positive failure of the containment system include waste detected in the leachate detection system, or a breach (e.g., a hole, tear, crack, or separation) in the base.

(c) If the waste pile must be removed from service as required by (b) of this subsection, the owner or operator must:

(i) Immediately stop adding wastes to the pile;

(ii) Immediately contain any leakage which has occurred or is occurring;

(iii) Immediately cause the leak to be stopped; and

(iv) If the leak cannot be stopped by any other means, remove the waste from the base.

(d) As part of the contingency plan required in WAC 173-303-350, the owner or operator must specify:

(i) A procedure for complying with the requirements of (c) of this subsection; and

(ii) A containment system evaluation and repair plan describing: Testing and monitoring techniques; procedures to be followed to evaluate the integrity of the containment system in the event of a possible failure; a schedule of actions to be taken in the event of a possible failure; and a description of the repair techniques and materials (and their availability) to be used in the event of leakage due to containment system failure or deterioration which does not require the waste pile to be removed from service. For EHW piles, the owner or operator must submit with his permit application a statement signed by a licensed professional engineer of the basis on which the evaluation and repair plan has been established.

(e) No waste pile that has been removed from service pursuant to (b) of this subsection, may be restored to service unless:

(i) The containment system has been repaired; and

(ii) The containment system has been certified by a qualified engineer as meeting the design specifications approved in the permit.

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(f) A waste pile that has been removed from service pursuant to (b) of this subsection, and will not be repaired, must be closed in accordance with subsection (9) of this section.

(7) Special requirements for ignitable or reactive waste. Ignitable or reactive waste must not be placed in a pile, unless:

(a) Addition of the waste to an existing pile results in the waste or mixture no longer meeting the definition of ignitable or reactive waste under WAC 173–303–090, and complies with WAC 173–303–395 (1)(b); or

(b)(i) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react; and


(8) Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials must not be placed in the same pile, unless WAC 173–303–395 (1)(b) is complied with.

(b) A pile of dangerous waste that is incompatible with any waste or other material stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials, or protected from them by means of a dike, berm, wall, or other device. Piles of incompatible wastes must not be served by the same containment system.

(c) Dangerous waste must not be piled on the same base where incompatible wastes or materials were previously piled, unless the base has been decontaminated sufficiently to ensure compliance with WAC 173–303–395 (1)(b).

(9) Closure and postclosure care.

(a) At closure, the owner or operator must remove or decontaminate all dangerous waste, waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them in accordance with this chapter.

(b) If, after removing or decontaminating all residues and making all reasonable efforts regarding removal or decontamination of contaminated components, subsoils, structures, and equipment as required in (a) of this subsection, the owner or operator finds that not all contaminated subsoils can be practically removed or decontaminated (except that no EHW may ever be left in place), he must close the facility and perform postclosure care in accordance with the closure and postclosure care requirements that apply to landfills, WAC 173–303–665(6).

(c)(i) The owner or operator of a waste pile that does not comply with the liner requirements of subsection (2)(a)(i) of this section, and is not exempt from them in accordance with subsection (1)(c) or (2)(d) of this section, must:

(A) Include in the closure plan for the pile under WAC 173–303–610(3) both a plan for complying with (a) of this subsection, and a contingent plan for complying with (b) of this subsection, in case not all contaminated subsoils can be practically removed at closure; and

(b) Prepare a contingent postclosure plan under WAC 173–303–610(8) for complying with (b) of this subsection, in case not all contaminated subsoils can be practically removed at closure.

(ii) The cost estimates calculated under WAC 173–303–620 (3) and (5) for closure and postclosure care of a pile must include the cost of complying with the contingent closure plan and the contingent postclosure plan but are not required to include the cost of expected closure under (a) of this subsection.

(10) Special requirements for dangerous wastes F020, F021, F022, F023, F026, and F027.

(a) Dangerous wastes F020, F021, F022, F023, F026, and F027 must not be placed in waste piles that are not enclosed (as defined in subsection (1)(c) of this section) unless the owner or operator operates the waste pile in accordance with a management plan for these wastes that is approved by the department pursuant to the standards set out in this subsection, and in accord with all other applicable requirements of this chapter. The factors to be considered are:

(i) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(ii) The attenuative properties of underlying and surrounding soils or other materials;

(iii) The mobilizing properties of other materials co-disposed with these wastes; and

(iv) The effectiveness of additional treatment, design, or monitoring techniques.

(b) The department may determine that additional design, operating, and monitoring requirements are necessary in order to reduce the possibility of migration of these wastes to ground water, to surface water, or air so as to protect human health and the environment.

report must be certified by a licensed professional engineer. The liner must be:

(A) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(C) Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

(ii) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the landfill. The department will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm (one foot). The leachate collection and removal system must be:

(A) Constructed of materials that are:

(I) Chemically resistant to the waste managed in the landfill and the leachate expected to be generated; and

(II) Of sufficient strength and thickness to prevent failure under the pressures exerted by overlying wastes, waste cover materials, and by any equipment used at the landfill; and

(B) Designed and operated to function without clogging through the scheduled closure of the landfill.

(b) The owner or operator will be exempted from the requirements of (a) of this subsection, if the department finds, based on a demonstration by the owner or operator, that alternative design and operating practices, together with location characteristics, will prevent the migration of any dangerous constituents into the ground water or surface water at any future time. In deciding whether to grant an exemption, the department will consider:

(i) The nature and quantity of the wastes;

(ii) The proposed alternate design and operation;

(iii) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the landfill and ground water or surface water; and

(iv) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

(c) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the landfill during peak discharge from at least a twenty-five-year storm.

(d) The owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a twenty-four-hour, twenty-five-year storm.

(e) Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously and in accordance with this chapter after storms to maintain design capacity of the system.

(f) If the landfill contains any particulate matter which may be subject to wind dispersal, the owner or operator must cover or otherwise manage the landfill to control wind dispersal.

(g) The department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this subsection are satisfied.

(3) Double-lined landfills; exemption from WAC 173-303-645, ground water protection requirements.

(a) The owner or operator of a double-lined landfill is not subject to regulation under WAC 173-303-645 if the following conditions are met:

(i) The landfill (including its underlying liners) must be located entirely above the seasonal high water table;

(ii) The landfill must be underlain by two liners which are designed and constructed in a manner to prevent the migration of liquids into or out of the space between the liners. Both liners must meet the specifications of subsection (2)(a)(i) of this section;

(iii) A leak detection system must be designed, constructed, maintained, and operated between the liners to detect any migration of liquid into the space between the liners; and

(iv) The landfill must have a leachate collection and removal system above the top liner that is designed, constructed, maintained, and operated in accordance with subsection (2)(a)(ii) of this section.

(b) If liquid leaks into the leak detection system, the owner or operator must:

(i) Notify the department of the leak in writing within seven days after detecting the leak; and

(ii) (A) Within the time period specified in the permit, remove accumulated liquid, repair or replace the liner which is leaking to prevent the migration of liquids through the liner, and obtain a certification from a qualified engineer that, to the best of his knowledge and opinion, the leak has been stopped; or

(B) If a detection monitoring program pursuant to WAC 173-303-645(9) has already been established in the permit (to be complied with only if a leak occurs), begin to comply with that program and any other applicable requirements of WAC 173-303-645 within the time period specified in the permit.

(c) The department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this subsection are satisfied.

(4) Monitoring and inspection.

(a) During construction or installation, liners (except in the case of existing portions of landfills exempt from subsection (2)(a) of this section), and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:

(i) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and
(ii) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural nonuniformities that may cause an increase in the permeability of the liner or cover.

(b) While a landfill is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

(i) Deterioration, malfunctions, or improper operation of run-on and run-off control systems;
(ii) The presence of liquids in leak detection systems, where installed to comply with subsection (3) of this section;
(iii) Proper functioning of wind dispersal control systems; and
(iv) The presence of leachate in and proper functioning of leachate collection and removal systems.

(5) Surveying and recordkeeping. The owner or operator of a landfill must maintain the following items in the operating record required under WAC 173-303-380:

(a) On a map, the exact location and dimensions, including depth, of each cell with respect to permanently surveyed benchmarks; and
(b) The contents of each cell and the approximate location of each dangerous waste type within each cell.

(6) Closure and postclosure care.

(a) At final closure of the landfill or upon closure of any cell, the owner or operator must cover the landfill or cell with a final cover designed and constructed to:

(i) Provide long-term minimization of migration of liquids through the closed landfill;
(ii) Function with minimum maintenance;
(iii) Promote drainage and minimize erosion or abrasion of the cover;
(iv) Accommodate settling and subsidence so that the cover’s integrity is maintained; and
(v) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

(b) After final closure, the owner or operator must comply with all postclosure requirements contained in WAC 173-303-610 (7), (8), (9), and (10) including maintenance and monitoring throughout the postclosure care period. The owner or operator must:

(i) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;
(ii) Maintain and monitor the leak detection system in accordance with subsection (3) of this section, where such a system is present between double liner systems;
(iii) Continue to operate the leachate collection and removal system until leachate is no longer detected;
(iv) Maintain and monitor the ground water monitoring system and comply with all other applicable requirements of WAC 173-303-645;
(v) Prevent run-on and run-off from eroding or otherwise damaging the final cover; and
(vi) Protect and maintain surveyed benchmarks used in complying with subsection (5) of this section.

(c) During the postclosure care period, if liquid leaks into a leak detection system installed under subsection (3) of this section, the owner or operator must notify the department of the leak in writing within seven days after detecting the leak. The department will modify the permit to require compliance with the requirements of WAC 173-303-645.

(7) Special requirements for incompatible wastes. Incompatible wastes, or incompatible wastes and materials must not be placed in the same landfill cell, unless WAC 173-303-395 (1)(b) is complied with.


WAC 173-303-800 Permit requirements for dangerous waste management facilities. (1) The purpose of WAC 173-303-800 through 173-303-840 is to establish the requirements for permits which will allow a dangerous waste facility to operate without endangering the public health and the environment.

(2) The owner/operator of a dangerous waste facility that transfers, treats, stores, or disposes (TSD) or recycles dangerous waste shall, when required by this chapter, obtain a permit covering the active life, closure period, ground water protection compliance period, and for any regulated unit (as defined in WAC 173-303-040(75)), and for any facility which at closure does not meet the removal or decontamination limits of WAC 173-303-610 (2)(b), post-closure care period in accordance with WAC 173-303-800 through 173-303-840.

(3) TSD facility permits will be granted only if the objectives of the siting and performance standards set forth in WAC 173-303-420 and 173-303-283 are met.

(4) Permits shall be issued according to the requirements of all applicable TSD facility standards.

(5) The owner/operator of a TSD facility is responsible for obtaining all other applicable federal, state, and local permits authorizing the development and operation of the TSD facility.

(6) The terms used in regard to permits which are not defined in WAC 173-303-040 shall have the same meanings as set forth in 40 CFR 270.2.

[Statutory Authority: Chapter 70.105 RCW, 88-18-083 (Order 88-29), § 173-303-800, filed 9/6/88; 88-07-039 (Order 87-37), § 173-303-800, filed 3/11/88; 84-09-088 (Order DE 83-36), § 173-303-800, filed 4/18/84, Statutory Authority: Chapter 70.105 RCW and RCW 70.95.260. 82-05-023 (Order DE 81-33), § 173-303-800, filed 2/10/82.]

WAC 173-303-801 Types of dangerous waste management facility permits. The following types of permits may be issued by the department to carry out the purpose of this regulation.

(1) Permits by rule:

(a) Ocean disposal – See WAC 173-303-802(2);
(b) Underground injection wells – See WAC 173-303-802(3);
(c) Publicly owned treatment works – See WAC 173-303-802(4); and
WAC 173-303-802 Permits by rule. (1) Purpose and applicability. This section provides for permit by rule for particular facilities and activities managing dangerous wastes, provided that certain conditions are met. These facilities, activities, and conditions are listed in this section. Owners and operators of facilities with permits by rule are not required to submit an application for a dangerous waste facility permit.

(2) Ocean disposal barges or vessels. The owner or operator of a barge or other vessel which accepts dangerous waste for ocean disposal, shall have a permit by rule if the owner or operator:

(a) Has a permit for ocean dumping issued under 40 CFR Part 220 (Ocean Dumping, authorized by the Marine Protection, Research, and Sanctuaries Act, as amended, 33 U.S.C. § 1420 et seq.); and

(b) Complies with the conditions of that permit; and

(c) Complies with the following dangerous waste regulations:

(i) WAC 173–303–060, notification and identification numbers;


(iii) WAC 173–303–370, manifest system;

(iv) WAC 173–303–380 (1)(a), operating record;

(v) WAC 173–303–390(2), annual report; and

(vi) WAC 173–303–390(1), unmanifested waste reports;

(d) Accepts the waste only if it meets all federal, state, and local pretreatment requirements which would be applicable to the waste if it were being discharged into the POTW through a sewer, pipe, or similar conveyance; and

(e) Accepts no EHW for disposal at the POTW.

(5) Totally enclosed treatment facilities or elementary neutralization or wastewater treatment units.

(a) The owner or operator of a totally enclosed treatment facility or an elementary neutralization or wastewater treatment unit shall have a permit by rule, except as provided in (b) or (c) of this subsection, if he complies with:

(i) WAC 173–303–060, notification and identification numbers;


(b) A facility is not required to have a permit by rule under this subsection if the owner or operator can demonstrate to the department's satisfaction that:

(i) The facility already has an existing permit (or permits) issued under federal, state or local authority (such as NPDES, state waste discharge, pretreatment, etc.); and

(ii) The permit (or permits) include, either separately or jointly in the case of multiple permits, all requirements specified in (a) of this subsection.

(c) The department may require the owner or operator of a totally enclosed treatment facility or an elementary neutralization or wastewater treatment unit subject to either (a) or (b) of this subsection to apply for and obtain a final facility permit in accordance with WAC 173–303–800 through 173–303–840, if:

(i) The owner or operator violates the general facility or performance requirements specified in (a) of this subsection;

(ii) The owner or operator is conducting other activities which require him to obtain a final facility permit;

(iii) The department determines that the general facility or performance requirements specified in (a) of
this subsection, are not sufficient to protect public health or the environment and that additional requirements under this chapter are necessary to provide such protection; or

(iv) The owner or operator does not comply with applicable local, state or federal requirements established pursuant to sections 402 or 307(b) of the Federal Clean Water Act, or chapter 90.48 RCW.

WAC 173-303-805 Interim status permits. (1) Applicability. This section applies to all facilities eligible for an interim status permit. When a facility is owned by one person but is operated by another person, it is the operator's duty to qualify for interim status, except that the owner must also sign an interim status application. Prior to submittal of an interim status permit application the requirements of WAC 173-303-281 must be met.

(2) Failure to qualify for interim status. If the department has reason to believe upon examination of a Part A application that it fails to provide the required information, it shall notify the owner or operator in writing of the apparent deficiency. Such notice shall specify the grounds for the department's belief that the application is deficient. The owner or operator shall have thirty days from receipt to respond to such a notification and to explain or cure the alleged deficiency in his Part A application. If, after such notification and opportunity for response, the department determines that the application is deficient it may take appropriate enforcement action.

(3) Interim status for facilities under RCRA interim status. Any existing facility operating under interim status gained under section 3005 of RCRA shall be deemed to have an interim status permit under this chapter provided that the owner/operator complies with the applicable requirements of WAC 173-303-400 and this section.

(4) Interim status for facilities managing state-designated (non–RCRA) dangerous wastes. Any existing facility which does not satisfy subsection (3) of this section, but which is only managing dangerous wastes that are not hazardous wastes under 40 CFR Part 261, shall be deemed to have an interim status permit under this chapter provided that the owner/operator of the facility has complied with the notification requirements of WAC 173-303-060 by May 11, 1982 and has submitted Part A of his permit application by August 9, 1982. If an existing facility becomes subject to this chapter due to amendments to this chapter and the facility was not previously subject to this chapter, then the owner/operator of an existing facility may qualify for an interim status permit by complying with the notification requirements of WAC 173-303-060 within three months, and submitting Part A of his permit application within six months, after the adoption date of the amendments which cause the facility to be subject to the requirements of this chapter. Facilities qualifying for interim status under this subsection shall not be deemed to have interim status under section 3005 of RCRA, and may only manage non–RCRA wastes until they either qualify separately for interim status under section 3005 of RCRA or receive a final status facility permit allowing them to manage RCRA wastes.

(5) Maintaining the interim status permit.

(a) Timely notification and submission of a Part A application qualifies the owner/operator of the existing TSD facility for the interim status permit, until the department terminates interim status pursuant to subsection (8) of this section.

(b) Interim status for the existing TSD facility shall be maintained while the department makes final administrative disposition of a final facility permit pursuant to WAC 173–303–806 if:

(i) The owner/operator has submitted his final facility permit application (as described in WAC 173–303–806) within six months of the written request by the department to submit such application; and

(ii) Grounds for terminating interim status (as described in subsection (8) of this section) do not exist.

(c) The owner/operator of an interim status facility must update his Part A whenever he is managing wastes that are newly regulated under this chapter, and as necessary to comply with subsection (7) of this section. Failure to comply with this updating requirement is a violation of interim status.

(6) Prohibitions for interim status permits. Facilities with an interim status permit shall not:

(a) Treat, store, or dispose of dangerous waste not specified in Part A of the permit application;

(b) Employ processes not specified in Part A of the permit application; or

(c) Exceed the design capacities specified in Part A of the permit application.

(7) Changes during interim status.

(a) Dangerous wastes not previously identified in Part A of the application may be treated, stored, or disposed of at a facility with interim status if the owner/operator submits to the department a revised Part A permit application prior to accepting the new dangerous wastes.

(b) Increases in the design capacity of processes used at a facility with interim status may be made if the owner or operator submits a revised Part A permit application prior to such a change, the requirements of WAC 173–303–281 are met and the department approves the change because of a lack of available treatment, storage, or disposal capacity at other permitted TSD facilities.

(c) Changes in the processes for the treatment, storage, or disposal of dangerous waste may be made at a facility with interim status, or additional processes may be added if the owner or operator submits a revised Part A permit application prior to such changes, the requirements of WAC 173–303–281 are met and the department approves the change because:

(i) It is necessary to prevent a threat to public health or the environment because of an emergency situation; or

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(ii) It is necessary to comply with state, local, or federal regulations.

(d) Changes in the ownership or operational control of a facility with interim status may be made if the new owner or operator submits a revised Part A permit application no later than ninety days prior to the scheduled change. When a transfer of ownership or operational control of a facility occurs, the old owner or operator shall comply with the interim status financial requirements of 40 CFR Part 265 subpart H (as referenced in WAC 173–303–400), until the new owner or operator has demonstrated to the department that he is complying with the financial requirements. The new owner or operator must demonstrate compliance with the financial requirements within six months of the date of the change in the ownership or operational control of the facility. All other interim status duties are transferred effective immediately upon the date of the change of ownership or operational control of the facility. Upon demonstration to the department by the new owner or operator of compliance with the interim status financial requirements, the department shall notify the old owner or operator in writing that he no longer needs to comply with the interim status financial requirements as of the date of demonstration.

(e) In no event shall changes be made to a TSD facility under the interim status permit which amount to reconstruction of the facility. Reconstruction occurs when the capital investment in the changes to the facility exceeds fifty percent of the capital cost of a comparable entirely new TSD facility.

(f) Any revisions to an existing interim status permit must be made on the applicable Part A form(s), (forms 1 or 3 are available from the department). The owner and operator certification page must be signed and included with those sections completed.

(8) Termination of interim status permit. The following are causes for terminating an interim status permit, or for denying a revised permit application:

(a) Final administrative disposition of a final facility permit application is made pursuant to WAC 173–303–806;

(b) When the department on examination or reexamination of a Part A application determines that it fails to meet the applicable standards of this chapter, it may notify the owner or operator that the application is deficient and that the interim status permit has been revoked. The owner or operator will then be subject to enforcement for operating without a permit;

(c) Failure to submit a requested Part B application on time, or to provide in full the information required in the Part B application;

(d) Violation of applicable interim status standards; or

(e) A determination that the permit applicant has failed to satisfy the performance standards of WAC 173–303–283.

(9) Special waste facilities. If the department determines, pursuant to WAC 173–303–550 through 173–303–560, that interim status standards can be reduced, the department will issue a notice of interim status modification stating what standards will be applied. Failure to comply with the conditions and standards as stated in the notice of modification or with the requirements of this section shall form a basis for revoking the notice. Upon revocation of the notice of interim status modification by the department, the owner or operator shall be subject to all of the requirements applicable to interim status dangerous waste management facilities. Before issuing the notice of modification, the department shall provide public notice of its intent, shall allow thirty days for public comment, and shall hold a public hearing if there is a significant degree of public interest or there is written notice of opposition and the department receives a request for a hearing during the comment period. Notice of a public hearing shall be provided at least fifteen days in advance, and the public comment period shall be extended to include the date of the hearing if it will occur after the initial thirty-day comment period. Within fifteen days of the end of the public comment period the department shall, based on comments received, issue, modify and issue, or deny the notice of interim status modification.

WAC 173–303–806 Final facility permits. (1) Applicability. This section applies to all dangerous waste facilities required to have a final facility permit. The final facility permit requirements are applicable to:

(a) Final status TSD facilities;

(b) Special waste management facilities; and

(c) Certain recycling facilities that are not exempt from the permit requirements.

(2) Application. Any person subject to the permit requirements of this section who intends to operate a new TSD facility must comply with WAC 173–303–281 and apply for a final facility permit. The department may, at any time, require the owner or operator of an existing TSD facility to apply for a final facility permit. Such owner or operator will be allowed one hundred eighty days to submit his application; the department may extend the length of the application period if it finds that there are good reasons to do so. The owner or operator of an existing TSD facility may voluntarily apply for a final facility permit at any time. Any person seeking a final facility permit shall complete, sign, and submit an application to the department. An application shall consist of a Part A permit form (which can be obtained from the department), and the contents of Part B as specified in subsection (4) of this section.

(3) Effective regulations. A final facility permit will include all applicable requirements of this chapter which are in effect on the date that the permit is issued by the department. WAC 173–303–840(7) provides a means for reopening permit proceedings at the discretion of the department where new requirements become effective. 

[1988 WAC Supp—page 502]
during the permitting process and are of sufficient magnitude to make additional proceedings desirable. Any other changes to the final facility permit will be in accordance with the permit modification requirements of WAC 173-303-830.

(4) Contents of Part B. Part B of a permit application shall consist of the information required in (a) through (h) of this subsection.

(a) General requirements. Part B of the permit application consists of the general information requirements of this subsection, and the specific information requirements in (b) through (h) of this subsection as applicable to the facility. The Part B information requirements presented in (a) through (h) of this subsection, reflect the standards promulgated in WAC 173-303-600. These information requirements are necessary in order for the department to determine compliance with WAC 173-303-600 through 173-303-670. If owners and operators of TSD facilities can demonstrate that the information prescribed in Part B cannot be provided to the extent required, the department may allow for submission of such information on a case-by-case basis. Information required in Part B shall be submitted to the department and signed in accordance with requirements in WAC 173-303-810(12). Certain technical data, such as design drawings and specifications, and engineering studies shall be certified by a registered professional engineer. The following information is required for all TSD facilities, except as WAC 173-303-600(3) provides otherwise.

(i) A general description of the facility.
(ii) Chemical, biological, and physical analyses of the dangerous waste to be handled at the facility. At a minimum, these analyses shall contain all the information which must be known to treat, store, or dispose of the wastes properly in accordance with WAC 173-303-600.
(iii) A copy of the waste analysis plan required by WAC 173-303-300(5) and, if applicable WAC 173-303-300(5)(g).
(iv) A description of the security procedures and equipment required by WAC 173-303-310, or a justification demonstrating the reasons for requesting a waiver of this requirement.
(vi) A justification of any request for a waiver of the preparedness and prevention requirements of WAC 173-303-340.
(vii) A copy of the contingency plan required by WAC 173-303-350: Include, where applicable, as part of the contingency plan, specific requirements in WAC 173-303-640(8), 173-303-650(5) and 173-303-660(6).
(viii) A description of procedures, structures, or equipment used at the facility to:
(A) Prevent hazards and contain spills in unloading/loading operations (for example, ramps, berms, pavement, special forklifts);
(B) Prevent run-off from dangerous waste handling areas to other areas of the facility or environment, or to prevent flooding (for example, berms, dikes, trenches);
(C) Prevent contamination of water supplies;
(D) Mitigate effects of equipment failure and power outages; and
(E) Prevent undue exposure of personnel to dangerous waste (for example, protective clothing).
(ix) A description of precautions to prevent accidental ignition or reaction of ignitable, reactive, or incompatible wastes as required to demonstrate compliance with WAC 173-303-395 including documentation demonstrating compliance with WAC 173-303-395 (1)(c).
(x) Traffic pattern, estimated volume (number, types of vehicles) and control (for example, show turns across traffic lanes, and stacking lanes if appropriate); describe access road surfacing and load bearing capacity; show traffic control signals.
(xi) Facility location information;
(A) In order to determine the applicability of the earthquake fault criteria (WAC 173-303-420(3)) the owner or operator of a new facility must identify the county in which the facility is proposed to be located.
(Comment: If the county is not listed in WAC 173-303-420 (3)(c), no further information is required to demonstrate compliance with WAC 173-303-420(3).)
(B) If the facility is proposed to be located in a county listed in WAC 173-303-420 (3)(c), the owner or operator shall demonstrate compliance with the seismic standard. This demonstration may be made using either published geologic data or data obtained from field investigations carried out by the applicant. The information provided must be of such quality to be acceptable to geologists experienced in identifying and evaluating seismic activity. The information submitted must show that either:
(I) No faults which have had displacement in Holocene time are present, or no lineations which suggest the presence of a fault (which have displacement in Holocene time) within three thousand feet of a facility are present, based on data from: Published geologic studies; aerial reconnaissance of the area within a five-mile radius from the facility; an analysis of aerial photographs covering a three thousand foot radius of the facility; and if needed to clarify the above data, a reconnaissance based on walking portions of the area within three thousand feet of the facility; or
(II) If faults (to include lineations) which have had displacement in Holocene time are present within three thousand feet of a facility, no faults pass within two hundred feet of the portions of the facility where treatment, storage, or disposal of dangerous waste will be conducted, based on data from a comprehensive geologic analysis of the site. Unless a site analysis is otherwise conclusive concerning the absence of faults within two hundred feet of such portions of the facility data shall be obtained from a subsurface exploration (trenching) of the area within a distance no less than two hundred feet from portions of the facility where treatment, storage, or disposal of dangerous waste will be conducted. Such
trenching shall be performed in a direction that is perpendicular to known faults (which have had displacement in Holocene time) passing within three thousand feet of the portions of the facility where treatment, storage, or disposal of dangerous waste will be conducted. Such investigation shall document with supporting maps and other analyses, the location of faults found.

(C) Owners and operators of all facilities shall provide an identification of whether the facility is located within a one hundred-year floodplain. This identification must indicate the source of data for such determination and include a copy of the relevant Federal Insurance Administration (FIA) flood map, if used, or the calculations and maps used where an FIA map is not available. Information shall also be provided identifying the one hundred-year flood level and any other special flooding factors (e.g., wave action) which must be considered in designing, constructing, operating, or maintaining the facility to withstand washout from a one hundred-year flood.

(Comment: Where maps for the National Flood Insurance Program produced by the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency are available, they will normally be determinative of whether a facility is located within or outside of the one hundred-year floodplain. However, if the FIA map excludes an area (usually areas of the floodplain less than two hundred feet in width), these areas must be considered and a determination made as to whether they are in the one hundred-year floodplain. Where FIA maps are not available for a proposed facility location, the owner or operator must use equivalent mapping techniques to determine whether the facility is within the one hundred-year floodplain, and if so located, what the one hundred-year flood elevation would be.)

(D) Owners and operators of facilities located in the one hundred-year floodplain must provide the following information:

(I) Engineering analysis to indicate the various hydrodynamic and hydrostatic forces expected to result at the site as the consequence of a one hundred-year flood;

(II) Structural or other engineering studies showing the design of operational units (e.g., tanks, incinerators) and flood protection devices (e.g., floodwalls, dikes) at the facility and how these will prevent washout;

(III) If applicable, and in lieu of (a)(xi)(E)(I) and (II) of this subsection, a detailed description of procedures to be followed to remove dangerous waste to safety before the facility is flooded, including: Timing of such movement relative to flood levels, including estimated time to move the waste, to show that such movement can be completed before floodwaters reach the facility; a description of the location(s) to which the waste will be moved and demonstration that those facilities will be eligible to receive dangerous waste in accordance with the regulations under this chapter; the planned procedures, equipment, and personnel to be used and the means to ensure that such resources will be available in time for use; and the potential for accidental discharges of the waste during movement.

(E) Owners and operators of all facilities shall provide all information necessary to demonstrate compliance with the shoreline siting standards of WAC 173-303-420(5).

(F) The owner or operator of a new disposal facility must provide all information necessary to demonstrate compliance with the sole source aquifer siting standards of WAC 173-303-420(6).

(xii) An outline of both the introductory and continuing training programs by owners or operators to prepare persons to operate or maintain the TSD facility in a safe manner as required to demonstrate compliance with WAC 173-303-330. A brief description of how training will be designed to meet actual job tasks in accordance with requirements in WAC 173-303-330 (1)(d).

(xiii) A copy of the closure plan and, where applicable, the post-closure plan required by WAC 173-303-610 (3) and (8). Include, where applicable, as part of the plans, specific requirements in WAC 173-303-630(10), 173-303-640(5), 173-303-650(6), 173-303-655(8), 173-303-660(9), and 173-303-665(6).

(xiv) For dangerous waste disposal units that have been closed, documentation that notices required under WAC 173-303-610(10) have been filed.

(xv) The most recent closure cost estimate for the facility prepared in accordance with WAC 173-303-620(3) and a copy of the documentation required to demonstrate financial assurance under WAC 173-303-620(4). For a new facility, a copy of the required documentation may be submitted sixty days prior to the initial receipt of dangerous wastes, if that is later than the submission of the Part B.

(xvi) Where applicable, the most recent post-closure cost estimate for the facility prepared in accordance with WAC 173-303-620(5) plus a copy of the documentation required to demonstrate financial assurance under WAC 173-303-620(6). For a new facility, a copy of the required documentation may be submitted sixty days prior to the initial receipt of dangerous wastes, if that is later than the submission of the Part B.

(xvii) Where applicable, a copy of the insurance policy or other documentation which comprises compliance with the requirements of WAC 173-303-620(8). For a new facility, documentation showing the amount of insurance meeting the specification of WAC 173-303-620 (8)(a) and, if applicable, WAC 173-303-620 (8)(b), that the owner or operator plans to have in effect before initial receipt of dangerous waste for treatment, storage, or disposal. A request for a variance in the amount of required coverage, for a new or existing facility, may be submitted as specified in WAC 173-303-620 (8)(c).

(xviii) A topographic map showing a distance of one thousand feet around the facility at a scale of 2.5 centimeters (1 inch) equal to not more than 61.0 meters (200 feet). Contours must be shown on the map. The contour interval must be sufficient to clearly show the pattern of surface water flow in the vicinity of and from each operational unit of the facility. For example, contours with an interval of 1.5 meters (5 feet), if relief is greater than...
6.1 meters (20 feet), or an interval of 0.6 meters (2 feet), if relief is less than 6.1 meters (20 feet). Owners and operators of TSD facilities located in mountainous areas should use large contour intervals to adequately show topographic profiles of facilities. The map shall clearly show the following:

(A) Map scale and date;
(B) One hundred-year floodplain area;
(C) Surface waters including intermittent streams;
(D) Surrounding land uses (residential, commercial, agricultural, recreational);
(E) A wind rose (i.e., prevailing windspeed and direction);
(F) Orientation of the map (north arrow);
(G) Legal boundaries of the TSD facility site;
(H) Access control (fences, gates);
(I) Injection and withdrawal wells both on-site and off-site;
(J) Buildings; treatment, storage, or disposal operations; or other structure (recreation areas, run-off control systems, access and internal roads, storm, sanitary, and process sewage systems, loading and unloading areas, fire control facilities, etc.);
(K) Barriers for drainage or flood control; and
(L) Location of operational units within the TSD facility site, where dangerous waste is (or will be) treated, stored, or disposed (include equipment clean-up areas).

(Note – For large TSD facilities the department will allow the use of other scales on a case-by-case basis.)

(xix) Applicants may be required to submit such information as may be necessary to enable the department to carry out its duties under other state or federal laws as required.

(xx) Additional information requirements. The following additional information regarding protection of ground water is required from owners or operators of dangerous waste surface impoundments, waste piles, land treatment units, and landfills except as otherwise provided in WAC 173–303–645 (1)(b):

(A) A summary of the ground water monitoring data obtained during the interim status period under 40 CFR 265.90 through 265.94, where applicable;
(B) Identification of the uppermost aquifer and aquifers hydraulically interconnected beneath the facility property, including ground water flow direction and rate, and the basis for such identification (i.e., the information obtained from hydrogeologic investigations of the facility area);
(C) On the topographic map required under (a)(xviii) of this subsection, a delineation of the waste management area, the property boundary, the proposed "point of compliance" as defined under WAC 173–303–645(6), the proposed location of ground water monitoring wells as required under WAC 173–303–645(8), and, to the extent possible, the information required in (a)(xx)(B) of this subsection;
(D) A description of any plume of contamination that has entered the ground water from a regulated unit at the time that the application was submitted that:
(I) Delineates the extent of the plume on the topographic map required under (a)(xviii) of this subsection;
(II) Identifies the concentration of each constituent throughout the plume or identifies the maximum concentrations of each constituent in the plume. ( Constituents are those listed in WAC 173–303–9905, and any other constituents not listed there which have caused a managed waste to be regulated under this chapter);
(E) Detailed plans and an engineering report describing the proposed ground water monitoring program to be implemented to meet the requirements of WAC 173–303–645(8);
(F) If the presence of dangerous constituents has not been detected in the ground water at the time of permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a detection monitoring program which meets the requirements of WAC 173–303–645(9). This submission must address the following items specified under WAC 173–303–645(9):
(I) A proposed list of indicator parameters, waste constituents, or reaction products that can provide a reliable indication of the presence of dangerous constituents in the ground water;
(II) A proposed ground water monitoring system;
(III) Background values for each proposed monitoring parameter or constituent, or procedures to calculate such values; and
(IV) A description of proposed sampling, analysis and statistical comparison procedures to be utilized in evaluating ground water monitoring data;
(G) If the presence of dangerous constituents has been detected in the ground water at the point of compliance at the time of permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a compliance monitoring program which meets the requirements of WAC 173–303–645(10). The owner or operator must also submit an engineering feasibility plan for a corrective action program necessary to meet the requirements of WAC 173–303–645(11) except as provided in WAC 173–303–645(9)(h)(v). To demonstrate compliance with WAC 173–303–645(10), the owner or operator must address the following items:
(I) A description of the wastes previously handled at the facility;
(II) A characterization of the contaminated ground water, including concentrations of dangerous constituents and parameters;
(III) A list of constituents and parameters for which compliance monitoring will be undertaken in accordance with WAC 173–303–645 (8) and (10);
(IV) Proposed concentration limits for each dangerous constituent and parameter, based on the criteria set forth in WAC 173–303–645 (5)(a), including a justification for establishing any alternate concentration limits;
(V) Detailed plans and an engineering report describing the proposed ground water monitoring system, in accordance with the requirements of WAC 173–303–645(8); and
(VI) A description of proposed sampling, analysis and statistical comparison procedures to be utilized in evaluating ground water monitoring data;
(H) If dangerous constituents or parameters have been measured in the ground water which exceed the concentration limits established under WAC 173–303–645(5), Table 1, or if ground water monitoring conducted at the time of permit application under 40 CFR 265.90 through 265.94 at the waste boundary indicates the presence of dangerous constituents from the facility in ground water over background concentrations, the owner or operator must submit sufficient information, supporting data, and analyses to establish a corrective action program which meets the requirements of WAC 173–303–645(11). However, an owner or operator is not required to submit information to establish a corrective action program if he demonstrates to the department that alternate concentration limits will protect human health and the environment after considering the criteria listed in WAC 173–303–645(5). An owner or operator who is not required to establish a corrective action program for this reason must instead submit sufficient information to establish a compliance monitoring program which meets the requirements of WAC 173–303–645(10) and (a)(xx)(F) of this subsection. To demonstrate compliance with WAC 173–303–645(11), the owner or operator must address, at a minimum, the following items:

(I) A characterization of the contaminated ground water, including concentrations of dangerous constituents and parameters;

(II) The concentration limit for each dangerous constituent and parameter found in the ground water as set forth in WAC 173–303–645(5);

(III) Detailed plans and an engineering report describing the corrective action to be taken; and

(IV) A description of how the ground water monitoring program will demonstrate the adequacy of the corrective action.

(b) Specific Part B information requirements for containers. Except as otherwise provided in WAC 173–303–600(3), owners and operators of facilities that store containers of dangerous waste must provide the following additional information:

(i) A description of the containment system to demonstrate compliance with WAC 173–303–630(7). Show at least the following:

(A) Basic design parameters, dimensions, and materials of construction including allowance for a twenty-five-year, twenty-four-hour storm;

(B) How the design promotes positive drainage control or how containers are kept from contact with standing liquids in the containment system;

(C) Capacity of the containment system relative to the volume of the largest container to be stored;

(D) Provisions for preventing or managing run-on;

(E) How accumulated liquids can be analyzed and removed to prevent overflow; and

(F) A description of the building or other protective covering for EHW containers;

(ii) For storage areas that store containers holding wastes that do not contain free liquids, a demonstration of compliance with WAC 173–303–630 (7)(c), including:

(A) Test procedures and results or other documentation or information to show that the wastes do not contain free liquids; and

(B) A description of how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing liquids;

(iii) A description of the procedures for labeling containers;

(iv) Sketches, drawings, or data demonstrating compliance with WAC 173–303–630(8) (location of buffer zone and containers holding ignitable or reactive wastes) and WAC 173–303–630 (9)(c) (location of incompatible wastes), where applicable; and

(v) Where incompatible wastes are stored or otherwise managed in containers, a description of the procedures used to ensure compliance with WAC 173–303–630 (9)(a) and (b), and 173–303–395 (1)(b) and (c).

(c) Specific Part B information requirements for tanks. Except as otherwise provided in WAC 173–303–600(3), owners and operators of facilities that use tanks to store or treat dangerous waste must provide the following information:

(i) References to design standards or other available information used (or to be used) in design and construction of the tank;

(ii) A description of design specifications including identification of construction materials and lining materials (include pertinent characteristics such as corrosion or erosion resistance);

(iii) Tank dimensions, capacity, and the basis for selecting shell thickness, certified by a licensed professional engineer;

(iv) A diagram of piping, instrumentation, and process flow;

(v) Description of feed systems, safety cutoff, bypass systems, and pressure controls (e.g., vents);

(vi) Description of procedures for handling incompatible ignitable, or reactive wastes, including the use of buffer zones;

(vii) A description of the containment system to demonstrate compliance with WAC 173–303–640 (2)(b) and, where applicable, WAC 173–303–640(8). Show at least the following:

(A) Drawings and a description of the basic design parameters, dimensions, and materials of construction of the containment system;

(B) Capacity of the containment system relative to the design capacity of the tank(s) within the system;

(C) Description of the system to detect leaks and spills, and how precipitation and run-on will be prevented from entering into the detection system;

(viii) A description of the marking and/or labeling of tanks; and

(ix) Tank design to prevent escape of vapors and emissions of acutely or chronically toxic (upon inhalation) EHW.

(d) Specific Part B information requirements for surface impoundments. Except as otherwise provided in WAC 173–303–600(3), owners and operators of facilities that store, treat, or dispose of dangerous waste in
surface impoundments must provide the following additional information:

(i) A list of the dangerous wastes placed or to be placed in each surface impoundment;

(ii) Detailed plans and an engineering report describing how the surface impoundment is or will be designed, constructed, operated and maintained to meet the requirements of WAC 173-303-650(2). This submission must address the following items as specified in WAC 173-303-650(2):

(A) The liner system (except for an existing portion of a surface impoundment), including the certification required by WAC 173-303-650(2)(a)(i)(D) for EHW management. If an exemption from the requirement for a liner is sought as provided by WAC 173-303-650(2)(b), submit detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any dangerous constituents into the ground water or surface water at any future time;

(B) Prevention of overtopping; and

(C) Structural integrity of dikes;

(iii) If an exemption from WAC 173-303-645 is sought, as provided by WAC 173-303-650(2), detailed plans and an engineering report explaining the location of the saturated zone in relation to the surface impoundment, and the design of a double-liner system that incorporates a leak detection system between the liners;

(iv) A description of how each surface impoundment, including the liner and cover systems and appurtenances for control of overtopping, will be inspected in order to meet the requirements of WAC 173-303-650(4)(a) and (b). This information should be included in the inspection plan submitted under (a)(v) of this subsection;

(v) A certification by a qualified engineer which attests to the structural integrity of each dike, as required under WAC 173-303-650(4)(c). For new units, the owner or operator must submit a statement by a qualified engineer that he will provide such a certification upon completion of construction in accordance with the plans and specifications;

(vi) A description of the procedure to be used for removing a surface impoundment from service, as required under WAC 173-303-650(5)(b) and (c). This information should be included in the contingency plan submitted under (a)(vii) of this subsection;

(vii) A description of how dangerous waste residues and contaminated materials will be removed from the unit at closure, as required under WAC 173-303-650(6)(a)(i). For any wastes not to be removed from the unit upon closure, the owner or operator must submit detailed plans and an engineering report describing how WAC 173-303-650(6)(a)(ii) and (b) will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under (a)(xiii) of this subsection;

(viii) If ignitable or reactive wastes are to be placed in a surface impoundment, an explanation of how WAC 173-303-650(7) will be complied with;

(ix) If incompatible wastes, or incompatible wastes and materials will be placed in a surface impoundment, an explanation of how WAC 173-303-650(8) will be complied with; and

(x) Where applicable, a waste management plan for Dangerous Waste Nos. F020, F021, F022, F023, F026, or F027 describing how the surface impoundment is or will be designed to meet the requirements of WAC 173-303-650(9).

(e) Specific Part B information requirements for waste piles. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that store or treat dangerous waste in waste piles must provide the following additional information:

(i) A list of dangerous wastes placed or to be placed in each waste pile;

(ii) If an exemption is sought to WAC 173-303-660(2), and 173-303-645 as provided by WAC 173-303-660(1)(c), an explanation of how the standards of WAC 173-303-660(1)(c) will be complied with;

(iii) Detailed plans and an engineering report describing how the pile is or will be designed, constructed, operated, and maintained to meet the requirements of WAC 173-303-660(2). This submission must address the following items as specified in WAC 173-303-660(2):

(A) The liner system (except for an existing portion of a pile), including the licensed engineer's certification when required by WAC 173-303-660(2)(c). If an exemption from the requirement for a liner is sought, as provided by WAC 173-303-660(2)(d), the owner or operator must submit detailed plans and engineering and hydrogeologic reports, as applicable, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituents into the ground water or surface water at any future time;

(B) Control of run-on;

(C) Control of run-off;

(D) Management of collection and holding units associated with run-on and run-off control systems; and

(E) Control of wind dispersal of particulate matter, where applicable;

(iv) If an exemption from WAC 173-303-645 is sought as provided by WAC 173-303-660(3) or (4), submit detailed plans and an engineering report describing how the requirements of WAC 173-303-660(3)(a) or (4)(a) will be complied with;

(v) A description of how each waste pile, including the liner and appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of WAC 173-303-660(5). This information should be included in the inspection plan submitted under (a)(v) of this subsection. If an exemption is sought to WAC 173-303-645 pursuant to WAC 173-303-660(4), describe in the inspection plan how the inspection requirements of WAC 173-303-660(4)(a)(iii) will be complied with;

(vi) If treatment is carried out on or in the pile, details of the process and equipment used, and the nature and quality of the residuals;
(vii) If ignitable or reactive wastes are to be placed in a waste pile, an explanation of how the requirements of WAC 173-303-660(7) will be complied with; 
(viii) If incompatible wastes, or incompatible wastes and materials will be placed in a waste pile, an explanation of how WAC 173-303-660(8) will be complied with; 
(ix) A description of how dangerous waste, waste residues and contaminated materials will be removed from the waste pile at closure, as required under WAC 173-303-660 (9)(a). For any waste not to be removed from the waste pile upon closure, the owner or operator must submit detailed plans and an engineering report describing how WAC 173-303-665 (6)(a) and (b) will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under (a)(xiii) of this subsection; 
(x) Where applicable, a waste management plan for Dangerous Waste Nos. F020, F021, F022, F023, F026, or F027 describing how a waste pile that is not enclosed (as defined in WAC 173-303-660 (1)(c)) is or will be designed, constructed, operated, and maintained to meet the requirements of WAC 173-303-660(10). 
(f) Specific Part B information requirements for incinerators. Except as WAC 173-303-670(1) provides otherwise, owners and operators of facilities that incinerate dangerous waste must fulfill the informational requirements of (f) of this subsection. 
(i) When seeking an exemption under WAC 173-303-670 (1)(b) (ignitable or reactive wastes only): 
(A) Documentation that the waste is listed as a dangerous waste in WAC 173-303-080, solely because it is ignitable; or 
(B) Documentation that the waste is listed as a dangerous waste in WAC 173-303-080, solely because it is reactive for characteristics other than those listed in WAC 173-303-090 (7)(a)(iv) and (v), and will not be burned when other dangerous wastes are present in the combustion zone; or 
(C) Documentation that the waste is a dangerous waste solely because it possesses the characteristic of ignitability, as determined by the tests for characteristics of dangerous waste under WAC 173-303-090; or 
(D) Documentation that the waste is a dangerous waste solely because it possesses the reactivity characteristics listed in WAC 173-303-090 (7)(a)(i), (ii), (iii), (vi), (vii), and (viii), and that it will not be burned when other dangerous wastes are present in the combustion zone. 
(ii) Submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with WAC 173-303-807. 
(iii) In lieu of a trial burn, the applicant may submit the following information; 
(A) An analysis of each waste or mixture of wastes to be burned including: 
(I) Heating value of the waste in the form and composition in which it will be burned; 
(II) Viscosity (if applicable), or description of physical form of the waste, and specific gravity of the waste; 
(B) A detailed engineering description of the incinerator, including: 
(i) Manufacturer's name and model number of incinerator; 
(ii) Type of incinerator; 
(iii) Linear dimension of incinerator unit including cross sectional area of combustion chamber; 
(iv) Description of auxiliary fuel system (type/feed); 
(v) Capacity of prime mover; 
(vi) Description of automatic waste feed cutoff system(s); 
(vii) Stack gas monitoring and pollution control monitoring system; 
(viii) Nozzle and burner design; 
(ix) Construction materials; and 
(x) Location and description of temperature, pressure, and flow indicating devices and control devices; 
(C) A description and analysis of the waste to be burned compared with the waste for which data from operational or trial burns are provided to support the contention that a trial burn is not needed. The data should include those items listed in (f)(iii)(A) of this subsection. This analysis should specify the principal organic dangerous constituents (PODC's) which the applicant has identified in the waste for which a permit is sought, and any differences from the PODC's in the waste for which burn data are provided; 
(D) The design and operating conditions of the incinerator unit to be used, compared with that for which comparative burn data are available; 
(E) A description of the results submitted from any previously conducted trial burn(s) including: 
(I) Sampling and analysis techniques used to calculate performance standards in WAC 173-303-670(4); and 
(II) Methods and results of monitoring temperatures, waste feed rates, carbon monoxide, and an appropriate indicator of combustion gas velocity (including a statement concerning the precision and accuracy of this measurement);
(F) The expected incinerator operation information to demonstrate compliance with WAC 173-303-670(4) and (6), including:

(I) Expected carbon monoxide (CO) level in the stack exhaust gas;

(II) Waste feed rate;

(III) Combustion zone temperature;

(IV) Indication of combustion gas velocity;

(V) Expected stack gas volume, flow rate, and temperature;

(VI) Computed residence time for waste in the combustion zone;

(VII) Expected hydrochloric acid removal efficiency;

(VIII) Expected fugitive emissions and their control procedures; and

(IX) Proposed waste feed cutoff limits based on the identified significant operating parameters;

(G) Such supplemental information as the department finds necessary to achieve the purposes of this subsection;

(H) Waste analysis data, including that submitted in (f)(ii)(A) of this subsection, sufficient to allow the department to specify as permit principal organic dangerous constituents (permit PODC's) those constituents for which destruction and removal efficiencies will be required; and

(I) Test protocols and sampling and analytical data to demonstrate the designation status under WAC 173-303-070 of:

(I) Incinerator ash residues, if any; and

(II) Residues from the air pollution control devices.

(iv) The department shall approve a permit application without a trial burn if the department finds that:

(A) The wastes are sufficiently similar; and

(B) The incinerator units are sufficiently similar, and the data from other trial burns are adequate to specify (under WAC 173-303-670(6)) operating conditions that will ensure that the performance standards in WAC 173-303-670(4) will be met by the incinerator.

(g) Specific Part B information requirements for land treatment facilities. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that use land treatment to dispose of dangerous waste must provide the following additional information:

(i) A description of plans to conduct a treatment demonstration as required under WAC 173-303-655(3). The description must include the following information:

(A) The wastes for which the demonstration will be made and the potential dangerous constituents in the waste;

(B) The data sources to be used to make the demonstration (e.g., literature, laboratory data, field data, or operating data);

(C) Any specific laboratory or field test that will be conducted, including:

(I) The type of test (e.g., column leaching, degradation);

(II) Materials and methods, including analytical procedures;

(III) Expected time for completion; and

(IV) Characteristics of the unit that will be simulated in the demonstration, including treatment zone characteristics, climatic conditions, and operating practices;

(ii) A description of a land treatment program, as required under WAC 173-303-655(2). This information must be submitted with the plans for the treatment demonstration, and updated following the treatment demonstration. The land treatment program must address the following items:

(A) The wastes to be land treated;

(B) Design measures and operating practices necessary to maximize treatment in accordance with WAC 173-303-655(4)(a) including:

(I) Waste application method and rate;

(II) Measures to control soil pH;

(III) Enhancement of microbial or chemical reactions; and

(IV) Control of moisture content;

(C) Provisions for unsaturated zone monitoring, including:

(I) Sampling equipment, procedures, and frequency;

(II) Procedures for selecting sampling locations;

(III) Analytical procedures;

(IV) Chain of custody control;

(V) Procedures for establishing background values;

(VI) Statistical methods for interpreting results; and

(VII) The justification for any dangerous constituents recommended for selection as principal dangerous constituents, in accordance with the criteria for such selection in WAC 173-303-655(6)(a);

(D) A list of dangerous constituents reasonably expected to be in, or derived from, the wastes to be land treated based on waste analysis performed pursuant to WAC 173-303-300;

(E) The proposed dimensions of the treatment zone;

(iii) A description of how the unit is or will be designed, constructed, operated, and maintained in order to meet the requirements of WAC 173-303-655(4). This submission must address the following items:

(A) Control of run-on;

(B) Collection and control of run-off;

(C) Minimization of run-off of dangerous constituents from the treatment zone;

(D) Management of collection and holding facilities associated with run-on and run-off control systems;

(E) Periodic inspection of the unit. This information should be included in the inspection plan submitted under (a)(v) of this subsection; and

(F) Control of wind dispersal of particulate matter, if applicable;

(iv) If food-chain crops are to be grown in or on the treatment zone of the land treatment unit, a description of how the demonstration required under WAC 173-303-655(5) will be conducted including:

(A) Characteristics of the food-chain crop for which the demonstration will be made;

(B) Characteristics of the waste, treatment zone, and waste application method and rate to be used in the demonstration;

(C) Procedures for crop growth, sample collection, sample analysis, and data evaluation;

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(D) Characteristics of the comparison crop including the location and conditions under which it was or will be grown; and

(E) If cadmium is present in the land treated waste, a description of how the requirements of WAC 173-303-655(5)(b) will be complied with;

(v) A description of the vegetative cover to be applied to closed portions of the facility, and a plan for maintaining such cover during the post-closure care period, as required under WAC 173-303-655(8)(a)(viii) and (c)(ii). This information should be included in the closure plan and, where applicable, the post-closure care plan submitted under (a)(xiii) of this subsection;

(vi) If ignitable or reactive wastes will be placed in or on the treatment zone, an explanation of how the requirements of WAC 173-303-655(9) will be complied with;

(vii) If incompatible wastes, or incompatible wastes and materials, will be placed in or on the same treatment zone, an explanation of how WAC 173-303-655(10) will be complied with.

(viii) Where applicable, a waste management plan for Dangerous Waste Nos. F020, F021, F022, F023, F026, or F027 describing how a land treatment facility is or will be designed, constructed, operated, and maintained to meet the requirements of WAC 173-303-655(12).

(h) Specific Part B information requirements for landfills. Except as otherwise provided in WAC 173-303-600(3), owners and operators of facilities that dispose of dangerous waste in landfills must provide the following additional information;

(i) A list of the dangerous wastes placed or to be placed in each landfill or landfill cell;

(ii) Detailed plans and an engineering report describing how the landfill is or will be designed, constructed, operated and maintained to comply with the requirements of WAC 173-303-665(2). This submission must address the following items as specified in WAC 173-303-665(2):

(A) The liner system and leachate collection and removal system (except for an existing portion of a landfill), including the licensed engineer's certification required by WAC 173-303-665(2)(a)(i). If an exemption from the requirements for a liner and a leachate collection and removal system is sought, as provided by WAC 173-303-665(2)(b), submit detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any dangerous constituent into the ground water or surface water at any future time;

(B) Control of run-on;

(C) Control of run-off;

(D) Management of collection and holding facilities associated with run-on and run-off control systems; and

(E) Control of wind dispersal of particulate matter, where applicable;

(iii) If an exemption from WAC 173-303-645 is sought, as provided by WAC 173-303-665(3), the owner or operator must submit detailed plans and an engineering report explaining the location of the saturated zone in relation to the landfill, the design of a double-liner system that incorporates a leak detection system between the liners, and a leachate collection and removal system above the liners;

(iv) A description of how each landfill, including the liner and cover systems, will be inspected in order to meet the requirements of WAC 173-303-665(4). This information should be included in the inspection plan submitted under (a)(v) of this subsection;

(v) Detailed plans and an engineering report describing the final cover which will be applied to each landfill or landfill cell at closure in accordance with WAC 173-303-665(6)(a), and a description of how each landfill will be maintained and monitored after closure in accordance with WAC 173-303-665(6)(b) and (c). This information should be included in the closure and post-closure plans submitted under (a)(xiii) of this subsection;

(vi) If ignitable or reactive wastes will be landfilled, an explanation of how the standards of WAC 173-303-665(7) will be complied with;

(vii) If incompatible wastes, or incompatible wastes and materials will be landfilled, an explanation of how WAC 173-303-665(8) will be complied with;

(viii) If bulk of noncontainerized liquid waste or wastes containing free liquids is to be landfilled, an explanation of how the requirements of WAC 173-303-665(9) will be complied with;

(ix) If containers of dangerous waste are to be landfilled, an explanation of how the requirements of WAC 173-303-665(10) will be complied with; and

(x) Where applicable, a waste management plan for Dangerous Waste Nos. F020, F021, F022, F023, F026, or F027 describing how a landfill is or will be designed, constructed, operated, and maintained to meet the requirements of WAC 173-303-665(11).

(5) Construction. A person may begin physical construction of a new facility, or of new portions of an existing facility if the new portions would amount to reconstruction under interim status (WAC 173-303-805(7)), only after complying with WAC 173-303-281, submitting Part A and Part B of the permit application and receiving a final facility permit. All permit applications must be submitted at least one hundred eighty days before physical construction is expected to begin.

(6) Reapplications. Any dangerous waste facility with an effective final facility permit shall submit a new application one hundred eighty days prior to the expiration date of the effective permit, unless the department grants a later date provided that such date will never be later than the expiration date of the effective permit.

(7) Continuation of expiring permits.

(a) When the owner/operator submits a timely application for a final facility permit and the application is determined by the department to be complete pursuant to subsection (8) of this section, the facility is allowed to continue operating under the expiring or expired permit until the effective date of the new permit.
(b) When the facility is not in compliance with the conditions of the expiring or expired permit, the department may choose to do any of the following:
   (i) Initiate enforcement action based upon the permit which has been continued;
   (ii) Issue a notice of intent to deny the new permit. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;
   (iii) Issue a new permit with appropriate conditions; and/or
   (iv) Take other actions authorized by this chapter.

(8) Completeness. The department shall not issue a final facility permit before receiving a complete application, except for permits by rule or emergency permits. An application for a permit is complete when the application form and any supplemental information has been submitted to the department's satisfaction. The completeness of any application for a permit shall be judged independently of the status of any other permit application or permit for the same facility or activity.

(9) Recordkeeping. Applicants shall keep records of all data used to complete the permit applications, and any supplemental information submitted to the department for a period of at least three years from the date the application is signed.

(10) General permit conditions. All final facility permits shall contain general permit conditions described in WAC 173-303-810.

(11) Permit duration.
   (a) Final facility permits shall be effective for a fixed term not to exceed ten years.
   (b) The department may issue any final facility permit for a duration that is less than the full allowable term.
   (c) The term of a final facility permit shall not be extended beyond ten years, unless otherwise authorized under subsection (7) of this section.

(12) Grounds for termination. The following are causes for terminating a final facility permit during its term, or for denying a permit application:
   (a) Noncompliance by the permittee with any condition of the permit;
   (b) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;
   (c) A determination that the permitted activity endangers public health or the environment and the hazard can only be controlled by permit modification or termination; or
   (d) A determination that the permit applicant has failed to satisfy the performance standards of WAC 173-303-283.

(13) Permit changes. All final facility permits shall be subject to the requirements of permit changes, WAC 173-303-830.

(14) Procedures for decision making. Issuance of final facility permits will be subject to the procedures for decision making described in WAC 173-303-840.

(15) Other requirements for final special waste and recycling facility permits. In lieu of issuing a final special waste or recycling facility permit, the department may, after providing opportunity for public comment in accordance with WAC 173-303-840, defer to a permit already issued under other statutory authority administered by the department (such as the State Water Pollution Control Act, chapter 90.48 RCW, the State Clean Air Act, chapter 70.94 RCW, etc.) which incorporates the requirements of this section, and WAC 173-303-500 through 173-303-525 for recycling facilities or WAC 173-303-550 through 173-303-560 for special waste facilities.

WAC 173-303-809 Research, development, and demonstration permits. (1) The department may issue a research, development, and demonstration permit for any dangerous waste treatment facility which proposes to utilize an innovative and experimental dangerous waste treatment technology or process for which permit standards for such experimental activity have not been promulgated under WAC 173-303-500 through 173-303-670. Any such permit shall include such terms and conditions as will assure protection of human health and the environment. Such permits:
   (a) Shall provide for the construction of such facilities as necessary, and for operation of the facility for not longer than one year unless renewed as provided in subsection (4) of this section; and
   (b) Shall provide for the receipt and treatment by the facility of only those types and quantities of dangerous waste which the department deems necessary for purposes of determining the efficacy and performance capabilities of the technology or process and the effects of such technology or process on human health and the environment; and
   (c) Shall include such requirements as the department deems necessary to protect human health and the environment (including, but not limited to, requirements regarding monitoring, operation, financial responsibility, closure, and remedial action), and such requirements as the department deems necessary regarding testing and providing of information to the department with respect to the operation of the facility.

(2) For the purpose of expediting review and issuance of permits under this section, the department may, consistent with the protection of human health and the environment, modify or waive permit application and permit issuance requirements in WAC 173-303-800 through 173-303-840 except that there may be no modification or waiver of regulations regarding financial responsibility (including insurance) or of procedures regarding public participation.

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(3) The department may order an immediate termination of all operations at the facility at any time he determines that termination is necessary to protect human health and the environment.

(4) Any permit issued under this section may be renewed not more than three times. Each such renewal shall be for a period of not more than one year.

[Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-809, filed 6/26/87; 84-14-031 (Order DE 84-22), § 173-303-809, filed 6/27/84.]

WAC 173-303-810 General permit conditions. (1) Purpose and applicability. This section sets forth the general permit conditions that are applicable to all permits, except interim status permits and permits by rule, to assure compliance with this chapter. If the conditions of this section are incorporated in a permit by reference, a specific citation to this section must be given in the permit.

(2) Duty to comply. The permittee must comply with all conditions of his permit. Any permit noncompliance constitutes a violation and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permits need not comply with the conditions of his permit to the extent and for the duration such noncompliance is authorized in an emergency permit.

(3) Duty to reapply. If the permittee wishes to continue an activity regulated by the permit after its expiration date, the permittee must apply for and obtain a new permit.

(4) Duty to halt or reduce activity. A permittee who has not complied with his permit, and who subsequently is subject to enforcement actions, may not argue that it would have been necessary to halt or reduce the permitted activities in order to maintain compliance with the conditions of the permit.

(5) Duty to mitigate. The permittee shall take all steps required by the department to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit.

(6) Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

(7) Permit actions. The permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, notification of planned changes, or anticipated noncompliance, does not stay any permit condition.

(8) Effect of a permit. The issuance of a permit does not convey any property rights of any sort, or any exclusive privilege. The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local laws or regulations.

(9) Duty to provide information. The permittee shall furnish to the department, within a reasonable time, any information which it may request to determine whether cause exists for modifying, revoking and reissuing, or terminating a permit, or to determine compliance with a permit. The permittee shall also furnish to the department, upon request, copies of records required to be kept by the permit.

(10) Inspection and entry. The permittee shall allow representatives of the department, upon the presentation of proper credentials, to:

(a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under the permit; and

(d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by chapter 173-303 WAC, any substances or parameters at any location.

(11) Monitoring and monitoring records.

(a) All permits shall specify:

(i) Requirements concerning the proper use, maintenance, and installation, when appropriate, of monitoring equipment or methods; and

(ii) Required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity including, when appropriate, continuous monitoring.

(b) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(c) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, or application. This period may be extended by request of the department at any time.

(d) Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;

(ii) The individual(s) who performed the sampling or measurements;

(iii) The date(s) analyses were performed;

(iv) The individual(s) who performed the analyses;

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(v) The analytical techniques or methods used; and
(vi) The results of such analyses.

(c) The permittee shall maintain all records of ground water quality and ground water surface elevations for the active life of the facility, and for the post-closure period as well.

(12) Signatory requirement. All applications, reports, or information submitted to the department shall be signed in accordance with this subsection and shall be certified according to subsection (13) of this section.

(a) Applications. When a dangerous waste facility is owned by one person, but is operated by another person, then the operator shall be the permit applicant and responsible for developing the permit application and all accompanying materials, except that the owner must also sign and certify the permit application. Permit applications shall be signed as follows:

(i) For a corporation: By a responsible corporate officer. For the purposes of this subsection, a responsible corporate officer means:

   (A) A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

   (B) The manager of one or more manufacturing, production or operating facilities employing more than two hundred fifty persons or having gross annual sales or expenditures exceeding twenty-five million dollars (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

(ii) For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

(iii) For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive officer of a federal agency includes:

   (A) The chief executive officer of the agency; or

   (B) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

(b) Reports. All reports required by permits and other information requested by the department shall be signed by a person described in (a) of this subsection, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(i) The authorization is made in writing by a person described in (a) of this subsection;

(ii) The authorization specifies either an individual or a position having responsibility for overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

(iii) The written authorization is submitted to the department.

(c) Changes to authorization. If an authorization under (b) of this subsection is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) of this subsection must be submitted to the department prior to or together with any reports, information, or applications to be signed by an authorized representative.

(13) Certification.

(a) Except as provided in (b) of this subsection, any person signing the documents required under (a) or (b) of subsection (12) of this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

(b) When a dangerous waste facility is owned by one person, but is operated by another person, then the permit application must be certified as follows:

(i) The operator must make the certification described under (a) of this subsection; and

(ii) The owner must make the following certification:

"I certify under penalty of law that I own the real property described in, and am aware of the contents of, this permit application, and that I have received a copy of this application. As owner of the real property, I understand that I am responsible for complying with any requirements of chapter 173-303 WAC with which only I am able to comply, and that there are significant penalties for failure to comply with such requirements."

(14) Reporting. The following reports shall be provided:

(a) Planned changes. The permittee shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. For a new TSD facility and for a facility being modified, the permittee may not treat, store, or dispose of dangerous waste in the new or modified portion of the facility until:

(i) The permittee has submitted to the department by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and either

(ii) The department has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or

(iii) Within fifteen days of the date of submission of the letter, the permittee has not received notice from the department of its intent to inspect, prior inspection is waived and the permittee may commence treatment, storage, or disposal of dangerous waste.

(b) Anticipated noncompliance. The permittee shall give advance notice to the department of any planned
changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) Transfers. The permit is not transferable to any person except after notice to the department. The department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary.

(d) Monitoring reports. Monitoring results (including monitoring of the facility’s impacts as required by the applicable sections of this chapter) shall be reported at the intervals specified elsewhere in the permit.

(e) Compliance schedules. Reports of permit compliance or noncompliance or any progress reports on interim and final permit requirements contained in any compliance schedule shall be submitted no later than fourteen days following each scheduled date.

(f) Immediate reporting. The permittee shall immediately report any noncompliance which may endanger health or the environment. Information shall be provided orally to the department as soon as the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances provided that the department may waive the written submission requirement in favor of a written report, to be submitted within fifteen days. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

Information which must be reported immediately shall include:

(i) Release of dangerous waste that may cause an endangerment to drinking water supplies or ground or surface waters;

(ii) Any information of a release or discharge of dangerous waste, fire, or explosion from the permitted facility which could threaten the environment or human health outside the facility;

(iii) The following description of any such occurrence:

(A) Name, address, and telephone number of the owner or operator;

(B) Name, address, and telephone number of the facility;

(C) Date, time, and type of incident;

(D) Name and quantity of material(s) involved;

(E) The extent of injuries, if any;

(F) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and

(G) Estimated quantity and disposition of recovered material that resulted from the incident.

(g) Other noncompliance. The permittee shall report all instances of noncompliance not reported under (d), (e), and (f) of this subsection, at the time monitoring reports are submitted. The reports shall contain the information listed in (f) of this subsection.

(h) Other information. Where the permittee becomes aware that he failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the department, he shall promptly submit this information.

(i) Other reports. In addition, the following reports are required when appropriate:

(i) Manifest discrepancy report as required by WAC 173–303–370(5);

(ii) Unmanifested waste report as required by WAC 173–303–390(1); and

(iii) Annual report as required by WAC 173–303–390(2).

(15) Confidentiality.

(a) Information submitted by the owner/operator of a facility identified as confidential will be treated in accordance with chapter 42.17 RCW and RCW 43.21A.160.

(b) Proprietary information can be held confidential if the owner/operator indicates to the department the degree of harm if the information is made to the public.

(c) Claims of confidentiality for permit application information must be substantiated at the time the application is submitted and in the manner prescribed in the application instructions. Claims of confidentiality for the name and address of any permit applicant will be denied.

(d) If a submitter does not provide substantiation, the department will notify the owner/operator by certified mail of the requirement to do so. If the department does not receive the substantiation within ten days after the submitter receives the notice, the department shall place the unsubstantiated information in the public file.

(e) The department will determine if the owner/operator's request meets the confidential information criteria.


WAC 173–303–830 Permit changes. (1) Purpose and applicability. This section describes the types of permit changes that may be made to all permits issued by the department. This section does not apply to permits by rule or interim status permits.

(2) Transfer of permits. A permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued under subsection (3) of this section, or a minor modification has been made to identify the new permittee and incorporate such other requirements as stipulated under subsection (4) of this section.

(3) Modification or revocation and reissuance of permits. When the department receives any information (for example, inspect the facility, receives information submitted by the permittee as required in the permit, receives a request for modification or revocation and reissuance, or conducts a review of the permit file), the department may determine whether or not one or more of the causes listed in (a) and (b) of this subsection for
modification or revocation and reissuance or both exist. 
If cause exists, the department may modify or revoke 
and reissue the permit accordingly and may request an 
updated application if necessary. When a permit is 
modified, only the conditions subject to modification are 
reopened. If a permit is revoked and reissued, the entire 
permit is reopened and subject to revision and the permit 
reissues for a new term. If cause does not exist under 
subsection (3) or (4) of this section, the department shall 
not modify or revoke and reissue the permit. If a permit 
modification satisfies the criteria in subsection (4) of 
this section for "minor modifications," the permit may 
be modified without a draft permit or public review. 
Otherwise, a draft permit must be prepared and public 
review provided in accordance with WAC 173-303-840. 

(a) Causes for modification. The following are causes 
for modification but not revocation and reissuance of 
permits, unless agreed to or requested by the permittee. 

(i) Alterations. There are material and substantial al-
terations or additions to the permitted facility or activity 
which occurred after permit issuance which justify the 
application of permit conditions that are different or ab-
sent in the existing permit;

(ii) Information. Permits may be modified during 
their terms if the department receives information that 
was not available at the time of permit issuance and 
which would have justified the application of different 
permit conditions at the time of issuance;

(iii) New regulations. The standards or regulations on 
which the permit was based have been changed by pro-
mulgation of amended standards or regulations or by ju-
dicial decision after the permit was issued. Permits may 
be modified during their terms for this cause only when:

(A) The permit condition requested to be modified 
was based on an effective regulation; and

(B) The department has revised, withdrawn, or modi-
fied that portion of the regulation on which the permit 
condition was based; and either

(I) The department decides to modify the permit be-
cause there would be a potential threat to public health 
or the environment if the permit does not incorporate the 
requirements of the amended regulation; or

(II) A permittee requests modification within ninety 
days after the date the regulation amendments are 
adopted;

(iv) Compliance schedules. The department deter-
mines good cause exists for modification of a compliance 
schedule, such as an act of God, strike, flood, or materi-
als shortage, or other events over which the permittee 
has little or no control and for which there is no reason-
ably available remedy;

(v) Closure plans or postclosure. When modification 
of a closure or postclosure plan is required under WAC 
173-303-610 (3) or (8); 

(vi) Revocation of changes approved prior to notice of 
closure. After the department receives the notification of 
expected closure under WAC 173-303-610(3), the de-
partment may determine that previously approved 
changes are no longer warranted. These include:

(A) Extension of the ninety or one hundred eighty day 
periods under WAC 173-303-610(4); 

(B) Modification of the thirty year postclosure period 
under WAC 173-303-610(7); 

(C) Continuation of security requirements under 
WAC 173-303-610(7); or 

(D) Permission to disturb the integrity of the contain-
ment system under WAC 173-303-610(7);

(vii) When the permittee has filed a request under 
WAC 173-303-620 for a variance to the level of finan-
cial responsibility or when the department demonstrates 
under WAC 173-303-620 that an upward adjustment of 
the level of financial responsibility is required;

(viii) When the corrective action program specified in 
the permit under WAC 173-303-645 has not brought 
the regulated unit into compliance with the ground wa-
ter protection standard within a reasonable period of 
time;

(ix) To include a detection monitoring program meet-
ing the requirements of WAC 173-303-645, when the 
owner or operator has been conducting a compliance 
monitoring program under WAC 173-303-645 or a cor-
rective action program under WAC 173-303-645 and 
compliance period ends before the end of the postclosure 
care period for the unit;

(x) When a permit requires a compliance monitoring 
program under WAC 173-303-645, but monitoring data 
collected prior to permit issuance indicate that the facil-
ity is exceeding the ground water protection standard;

(xi) To include conditions applicable to units at a fa-
cility that were not previously included in the facility's 
permit; or

(xii) When a land treatment unit is not achieving 
complete treatment of dangerous constituents under its 
current permit conditions.

(b) Causes for modification or revocation and reissu-
ance. The following are causes to modify, or alterna-
tively, revoke and reissue a permit:

(i) Cause exists for termination under WAC 173-
303-806(11) for final facility permits, and the depart-
ment determines that modification or revocation and re-
issuance is appropriate; or

(ii) The department has received notification of a 
proposed transfer of the permit.

(c) Facility siting. Suitability of the facility location 
will not be considered at the time of permit modification 
or revocation and reissuance unless new information or 
standards indicate that a threat to human health or the 
environment exists which was unknown at the time of 
permit issuance.

(4) Minor modifications of permits. Unless the per-
mittee indicates otherwise, the department may modify a 
permit to make the corrections or allowances for changes 
in the permitted activity listed in this section without 
following the procedures of WAC 173-303-840. Any 
permit modification not processed as a minor modification 
under this section must be made for cause and with 
a draft permit and public notice as required in WAC 
173-303-840. Minor modifications may only be made to:

(a) Correct typographical errors;

(b) Require more frequent monitoring or reporting by 
the permittee;
(c) Change an interim compliance date in a schedule of compliance, provided the new date is not more than one hundred twenty days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement;

(d) Allow for a change in ownership or operational control of a facility where the department determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility between the current and new permittees has been submitted to the department. Changes in the ownership or operational control of a facility may be made if the new owner or operator submits a revised permit application no later than ninety days prior to the scheduled change. When a transfer of ownership or operational control of a facility occurs, the old owner or operator shall comply with the requirements of WAC 173-303-620 (Financial requirements), until the new owner or operator has demonstrated to the department that he is complying with the requirements of that section. The new owner or operator must demonstrate compliance with financial requirements within six months of the date of the change in the ownership or operational control of the facility. Upon demonstration to the department by the new owner or operator of compliance with WAC 173-303-620, the department shall notify the old owner or operator in writing that he no longer needs to comply with the financial requirements as of the date of demonstration;

(e) Change the lists of facility emergency coordinators or equipment in the permit's contingency plan;

(f) Change the following:

(i) Estimates of maximum inventory under WAC 173-303-610 (3)(a)(iii);

(ii) Estimates of expected year of closure or schedules for final closure under WAC 173-303-610 (3)(a)(vii); or

(iii) Approve periods longer than ninety days or one hundred eighty days under WAC 173-303-610 (4)(a) or (b);

(g) Change the ranges of the operating requirements set in the permit to reflect the results of the trial burn, provided that the change is minor;

(h) Change the operating requirements set in the permit for conducting a trial burn, provided that the change is minor;

(i) Grant one extension of the time period for determining operational readiness following completion of construction, for up to seven hundred twenty hours operating time for treatment of dangerous waste in an incinerator;

(j) Change the treatment program requirements for land treatment units under WAC 173-303-655(2) to improve treatment of dangerous constituents, provided that the change is minor;

(k) Change any conditions specified in the permit for land treatment units to reflect the results of field tests or laboratory analyses used in making a treatment demonstration in accordance with WAC 173-303-808, provided that the change is minor; and

(l) Allow a second treatment demonstration for land treatment to be conducted when the results of the first demonstration have not shown the conditions under which the waste or wastes can be treated completely as required by WAC 173-303-655, provided that the conditions for the second demonstration are substantially the same as the conditions for the first demonstration.

(5) Permit termination. The department shall follow the applicable procedures in WAC 173-303-840, procedures for decision making, in terminating any permit. The following are causes for terminating a permit during its term or for denying a permit renewal application:

(a) Noncompliance by the permittee with any condition of the permit;

(b) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time; or

(c) A determination that the permitted activity endangers public health or the environment and can only be regulated to acceptable levels by permit modification or termination.

(6) Schedules of compliance.

(a) General. The permit may, when appropriate, specify a schedule of compliance leading to compliance with chapter 173-303 WAC.

(b) Time for compliance. Any schedules of compliance under this section shall require compliance as soon as possible.

(c) Interim dates. If a permit establishes a schedule of compliance which exceeds one year from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement as follows;

(i) The time between interim dates shall not exceed one year; or

(ii) If the time necessary for completion of any interim requirement (such as the construction of a control facility) is more than one year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.

(d) Reporting. The permit shall be written to require that no later than fourteen days following each interim date and the final date of compliance, the permittee shall notify the department in writing of its compliance or noncompliance with the interim or final requirements.

[Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-830, filed 6/26/87, 84-09-098 (Order DE 83-36), § 173-303-830, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW. 82-05-023 (Order DE 81-33), § 173-303-830, filed 2/10/82.]

WAC 173-303-901 Repealed. See Disposition Table at beginning of this chapter.

WAC 173-303-905 Response to requests for public records. RCW 42.17.320 requires that the department, when responding to requests for public records make such responses "promptly." The department often receives requests, submitted pursuant to chapter 42.17
RCW, for public records that exist because of the requirements of or actions mandated by this chapter (such public records are referred to as dangerous waste records). When the department receives requests for such dangerous waste records, then the department shall respond promptly, as required by RCW 42.17.320, and in no event will the response occur later than twenty working days after receipt of the public request submitted pursuant to chapter 42.17 RCW.

(a) Any person may petition the department to modify or revoke any provision in this chapter. This subsection sets forth general requirements which apply to all such petitions. The remaining subsections of this section describe additional requirements for specific types of petitions.
(b) Each petition must be submitted to the department by certified mail and must include:
(i) The petitioner's name and address;
(ii) A statement of the petitioner's interest in the proposed action;
(iii) A description of the proposed action, including (where appropriate) suggested regulatory language; and
(iv) A statement of the need and justification for the proposed action, including any supporting tests, studies, or other information.
(c) The department will make a tentative decision to grant or deny the petition and give public notice of the tentative decision in writing. The notice shall be distributed to interested persons on a mailing list developed specifically for petitions and persons expressing interest in amendments to this chapter. The public comment period shall be a minimum of forty-five days.
(d) Upon the written request of any interested person, the director may, at his discretion, hold a conference to consider oral comments on the action proposed in the petition. A person requesting a conference must state the issues to be raised and explain why written comments would not suffice to communicate the person's views. The director may in any case decide on his own motion to hold a conference.
(e) After evaluating all public comments the department will make a final decision in accordance with RCW 34.04.060 or 34.04.080. The department will either deny the petition in writing (stating its reasons for denial), or grant the petition and, when appropriate, initiate rule-making proceedings in accordance with RCW 34.04.025.
(2) Petitions for equivalent testing or analytical methods.
(a) Any person seeking to add a testing or analytical method to WAC 173–303–110 may petition the department for a regulatory amendment under this section. To be successful, the person must demonstrate to the satisfaction of the department that the proposed method is equal to or superior to the corresponding method prescribed in WAC 173–303–110, in terms of its sensitivity, accuracy, and precision (i.e., reproducibility).
(b) Each petition must include, in addition to the information required by subsection (1) of this section:
(i) A full description of the proposed method, including all procedural steps and equipment used in the method;
(ii) A description of the types of wastes or waste matrices for which the proposed method may be used;
(iii) Comparative results obtained from using the proposed method with those obtained from using the relevant or corresponding methods prescribed in WAC 173–303–110;
(iv) An assessment of any factors which may interfere with, or limit the use of, the proposed method; and
(v) A description of the quality control procedures necessary to ensure the sensitivity, accuracy and precision of the proposed method.
(c) After receiving a petition for an equivalent testing or analytical method, the department may request any additional information on the proposed method which it may reasonably require to evaluate the proposal.
(d) If the department amends the regulations to permit use of a new testing method, the method will be incorporated in a document which will be available from the department.
(3) Petitions for exempting dangerous wastes from a particular generator.
(a) Any generator seeking to exempt his dangerous waste may petition the department for exemption from the requirements of WAC 173–303–070 through 173–303–103.
(b) To be successful, the generator must make the demonstrations required in WAC 173–303–072(3) and, where applicable, (4) and (5).
(c) Each petition must include, in addition to the information required by subsection (1) of this section:
(i) The name and address of the laboratory facility performing the sampling or tests of the waste;
(ii) The names and qualifications of the persons sampling and testing the waste;
(iii) The dates of sampling and testing;
(iv) The location of the generating facility;
(v) A description of the manufacturing processes or other operations and feed materials producing the waste and an assessment of whether such processes, operations, or feed materials can or might produce a waste that is not covered by the demonstration;
(vi) A description of the waste and an estimate of the average and maximum monthly and annual quantities of waste covered by the demonstration;
(vii) Pertinent data on and discussion of the factors delineated in WAC 173–303–072(3) and, where applicable, (4) and (5);
(viii) A description of the methodologies and equipment used to obtain the representative samples;
(ix) A description of the sample handling and preparation techniques, including techniques used for extraction, containerization and preservation of the samples;
(x) A description of the tests performed (including results);
(xi) The names and model numbers of the instruments used in performing the tests and the date of the last calibration for instruments which must be calibrated according to manufacturer's instructions; and

(xii) The following statement signed by the generator of the waste or his authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(d) After receiving a petition for a dangerous waste exemption, the department may request any additional information which it may reasonably require to evaluate the petition.

(e) An exemption will only apply to the waste generated by the particular generator covered by the demonstration and will not apply to waste from any other generator.

(f) The department may exempt only part of the waste for which the demonstration is submitted where there is reason to believe that variability of the waste justifies a partial exemption.

(g) The department may (but shall not be required to) grant a temporary exemption before making a final decision under subsection (1) of this section, whenever it finds that there is a substantial likelihood that an exemption will be finally granted.

(h) Any waste for which an exemption is sought will remain designated and be subject to the applicable requirements of this chapter until the generator of the waste is notified by the department that his waste is exempt.

(4) Petition for exclusion.

(a) Any generators seeking exclusion of a class of similar or identical wastes under WAC 173-303-071, excluded categories of waste, may petition the department for exclusion. To be successful, the generator(s) must make the demonstrations required in WAC 173-303-072(6) for all those wastes generated in the state which might be excluded pursuant to granting a petition submitted under this subsection. No class of wastes will be excluded if any of the wastes are regulated as hazardous waste under 40 CFR Part 261.

(b) Each petition for exclusion must include the information required by subsections (1) and (3)(c) of this section and any other information required by the department.

(c) After receiving a petition for exclusion, the department may request any additional information it deems necessary to evaluate the petition.

(5) Petition for designation change. The provisions of (a)(i) of this subsection do not apply to any dangerous waste which is also designated as a hazardous waste under 40 CFR Part 261 Subpart D.

(a) A generator may petition the department to change the designation of his waste as follows:

(i) A waste which is designated only for toxicity pursuant to WAC 173-303-084 or 173-303-101 but which is toxic solely because it is highly acidic or basic (i.e., due to high or low pH) may be subject only to the requirements for corrosive dangerous wastes, provided that the generator can demonstrate this fact to the department's satisfaction through information provided under (b) of this subsection; and

(ii) A waste which is designated EHW may be redesignated DW, provided that the generator can demonstrate that such redesignation is appropriate through information provided under (b) of this subsection.

(b) A petition under this subsection must include:

(i) The information required by subsections (1) and (3)(c) of this section; and

(ii) Such other information as required by the department.

(c) A designation change under this subsection will become effective only after the department has approved the change and notified the generator of such approval.

(6) Petitions to allow land disposal of a waste restricted under WAC 173-303-140.

(a) Any person seeking a land disposal restriction exemption allowed under WAC 173-303-140(6) must submit a petition to the department. The petition must include the following general information:

(i) The petitioner's name and address;

(ii) A statement of the petitioner's interest in the proposed action;

(iii) A description of the proposed action;

(iv) A statement of the need and justification for the proposed action;

(v) An identification of the specific waste and the specific land disposal unit for which the exemption is desired;

(vi) A waste analysis to describe fully the chemical and physical characteristics of the subject waste. All waste and environmental sampling, test, and analysis data must be accurate and reproducible to the extent that state-of-the-art techniques allow; and

(vii) A quality assurance and quality control plan that addresses all sampling and testing aspects of the information provided in the petition.

(b) In addition to the general information requirements in subsection (a) of this section, the following specific information must be provided in the petition for individual case-by-case exemptions.

(i) Petition for land disposal exemption for treatment residuals. Petitions for exemption of treatment residuals, as allowed under WAC 173-303-140 (6)(a), must:

(A) Provide the type of waste management or treatment method applied to the waste and the rationale for selecting this method as the best achievable management method; and

(B) Document that the land disposal of the treatment residual would not pose a greater risk to public health and the environment than land disposal of the original wastes, including an analysis of the treatment residuals.
to fully describe their chemical and physical characteristics; and

(C) Provide the management alternatives for the treatment residuals and the factors which, if an exemption is not granted, would prevent the utilization of the best achievable management method for the original dangerous waste.

(ii) Petition for economic hardship exemption. Petitions for exemption on the basis of economic hardship, as allowed under WAC 173-303-140 (6)(b), must:

(A) Supply the current management costs and the projected management costs to comply with the requirements of WAC 173-303-140; and

(B) Provide the source of information utilized in determining the economic estimates; and

(C) Provide a discussion of how the projected compliance costs would impose an unreasonable economic burden.

(iii) Petition for leachable inorganic waste exemption. Petitions for exemption of leachable inorganic wastes, as allowed under WAC 173-303-140 (6)(c), must:

(A) Provide information demonstrating that the stabilization of the dangerous waste is less protective of public health and the environment than landfilling; or

(B) Provide a list of stabilization facilities that could accept the dangerous waste and information demonstrating that they do not have available capacity to stabilize the waste; or

(C) Provide information describing the types of stabilization utilized which did not reduce the solubility and mobility of the dangerous waste constituents and describe any other stabilization methods that have been considered but not utilized.

(iv) Petition for organic/carbonaceous waste exemption. Petitions for exemption of organic/carbonaceous wastes, as allowed under WAC 173-303-140 (6)(d), must:

(A) Provide information demonstrating that recycling, treatment and incineration facilities are unavailable for the waste, including a map marked both with the point of waste generation and the point(s) of the nearest treatment, recycling and incineration facility(s) that could manage the dangerous waste; or

(B) Provide information demonstrating that the alternative management methods for organic/carbonaceous waste are less protective of public health and the environment than stabilization and landfilling; or

(C) Provide information demonstrating that:

(I) Recycling and treatment facilities are unavailable for the waste, including a map marked both with the point of waste generation and the point(s) of the nearest treatment, recycling and incineration facility(s) that could manage the dangerous waste; and

(II) The organic/carbonaceous waste has a heat content less than 3,000 BTU/LB or a moisture content greater than sixty-five percent.

(c) Each petition must include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(d) Each petition must be submitted to:

Department of Ecology
Hazardous Waste Land Disposal Exemption
Mailstop PV-11
Olympia, WA 98504–8711

(e) After receiving a petition, the department may request any additional information that reasonably may be required to evaluate the petition and accompanying demonstration, such as a comprehensive characterization of the disposal unit site including an analysis of background air, soil, and water quality. Simulation models must be calibrated for the specific waste and site conditions, and verified for accuracy by comparison with actual measurements.

(f)(i) The department will make a tentative decision to grant or deny the petition and give public notice of the tentative decision in writing. The notice shall be distributed to interested persons on a mailing list developed specifically for petitions and persons expressing interest in amendments to this chapter. The public comment period shall be a minimum of forty-five days.

(ii) Upon the written request of any interested person, the department may, at its discretion, hold a conference to consider oral comments on the action proposed in the petition. A person requesting a conference must state the issues to be raised and explain why written comments would not suffice to communicate the person's views. The department may in any case decide on its own motion to hold a conference.

(iii) After evaluating all public comments the department will make a final decision in accordance with RCW 34.04.060 or 34.04.080. The department will either deny the petition in writing (stating its reasons for denial), or grant the petition.

(g) Prior to the department's decision, the applicant is required to comply with all restrictions on land disposal under WAC 173-303-140. The department should respond to a petition within ninety days.

(h) If an exemption is granted, the department may include specific conditions as deemed necessary by the department to protect public health and the environment.

(i) If granted, the exemption will apply to land disposal of the specific restricted waste at the individual disposal unit described in the petition and accompanying demonstration. The exemption will not apply to any other restricted waste at that disposal unit, nor will it apply to that specific restricted waste at any other disposal unit.

(j) If an exemption is granted, the department may withdraw the exemption on the following bases:
(i) If there is a threat to public health and the environment; or
(ii) If there is migration of dangerous waste constituents from the land disposal unit or site for as long as the waste remains dangerous; or
(iii) If the department finds reason to believe that the information submitted in a petition is inaccurate or has been falsified such that the petition should have been denied.

(k) The term of an exemption granted under this subsection will be established by the department at the time of issuance.

(l) Any exemption granted by the department does not relieve the petitioner of his responsibilities in the management of dangerous waste under chapter 173-303 WAC.

(m) The department may (but shall not be required to) grant a temporary exemption before making a final decision, whenever it finds that there is a substantial likelihood that an exemption will be finally granted. Temporary exemptions shall not be subject to the procedures of (f) of this subsection. Temporary exemptions shall not be a cause of delaying final decision making on the petition request.


WAC 173-303-9901 Flow chart for designating dangerous wastes. (Reserved.)

[Statutory Authority: Chapter 70.105 RCW. 87-14-029 (Order DE-87-4), § 173-303-9901, filed 6/26/87; 84-09-088 (Order DE 83-36), § 173-303-9901, filed 4/18/84. Statutory Authority: RCW 70.95.260 and chapter 70.105 RCW, 82-05-023 (Order DE 81-33), § 173-303-9901, filed 2/10/82.]

WAC 173-303-9904 Dangerous waste sources list. DANGEROUS WASTE SOURCES LIST

Dangerous Waste No. Sources

| Generic: | | |
| --- | --- | |
| F001 | The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; and sludges from the recovery of these solvents in degreasing operations. (See footnote 1, below.) | from the recovery of these solvents. (See footnote 1, below.) |
| F002 | The following spent halogenated solvents: Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, and trichlorofluoromethane; and the still bottoms from the recovery of these solvents. | |
| F003 | The following spent nonhalogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; and the still bottoms from the recovery of these solvents. | |
| F004 | The following spent nonhalogenated solvents: Cresols and cresylic acid, nitrobenzene; and the still bottoms from the recovery of these solvents. | |
| F005 | The following spent nonhalogenated solvents: Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine; and the still bottoms from the recovery of these solvents. | |
| F006 | Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc–aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc, and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum. | |
| F007 | Spent cyanide plating bath solutions from electroplating operations. | |
| F008 | Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process. | |
| F009 | Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process. | |
| F010 | Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process. | |
| F011 | Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations. | |
| F012 | Quenching wastewater treatment sludges from metal heat–treating operations where cyanides are used in the process. | |
| F020 | Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri– or tetrachlorophenol, or of intermediates used to | |

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Dangerous Waste No. Sources

produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.) (See footnote 2, below.)

<table>
<thead>
<tr>
<th>Dangerous Waste No.</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>F021 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives. (See footnote 2, below.)</td>
<td></td>
</tr>
<tr>
<td>F022 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions. (See footnote 2, below.)</td>
<td></td>
</tr>
<tr>
<td>F023 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (See footnote 2, below.) (This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol.)</td>
<td></td>
</tr>
<tr>
<td>F026 Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions. (See footnote 2, below.)</td>
<td></td>
</tr>
<tr>
<td>F027 Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (See footnote 2, below.) (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)</td>
<td></td>
</tr>
<tr>
<td>F028 Residues resulting from the incineration or thermal treatment of soil contaminated with nonspecific sources wastes F020, F021, F022, F023, F026 and F027.</td>
<td></td>
</tr>
<tr>
<td>F024 Wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor cleanout wastes from the production of chlorinated aliphatic hydrocarbons, having carbon content from one to five, utilizing free radical catalyzed processes. (See footnote 1, below.) (This listing does not include light ends, spent filters and filter aids, spent dessicants, wastewater, wastewater treatment sludges, spent catalysts, and wastes listed under specific sources, below.)</td>
<td></td>
</tr>
</tbody>
</table>

**Specific Sources**

**Wood Preservation:**

<table>
<thead>
<tr>
<th>Dangerous Waste No.</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>K001 Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol. (See footnote 1, below.)</td>
<td></td>
</tr>
</tbody>
</table>

**Inorganic Pigments:**

<table>
<thead>
<tr>
<th>Dangerous Waste No.</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>K002 Wastewater treatment sludge from the production of chrome yellow and orange pigments.</td>
<td></td>
</tr>
<tr>
<td>K003 Wastewater treatment sludge from the production of molybdate orange pigments.</td>
<td></td>
</tr>
<tr>
<td>K004 Wastewater treatment sludge from the production of zinc yellow pigments.</td>
<td></td>
</tr>
<tr>
<td>K005 Wastewater treatment sludge from the production of chrome green pigments.</td>
<td></td>
</tr>
<tr>
<td>K006 Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).</td>
<td></td>
</tr>
<tr>
<td>K007 Wastewater treatment sludge from the production of iron blue pigments.</td>
<td></td>
</tr>
<tr>
<td>K008 Oven residue from the production of chrome oxide green pigments.</td>
<td></td>
</tr>
</tbody>
</table>

**Organic Chemicals:**

<table>
<thead>
<tr>
<th>Dangerous Waste No.</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>K009 Distillation bottoms from the production of acetaldehyde from ethylene.</td>
<td></td>
</tr>
<tr>
<td>K010 Distillation side cuts from the production of acetaldehyde from ethylene.</td>
<td></td>
</tr>
<tr>
<td>K011 Bottom stream from the wastewater stripper in the production of acrylonitrile.</td>
<td></td>
</tr>
<tr>
<td>K013 Bottom stream from the acetonitrile column in the production of acrylonitrile.</td>
<td></td>
</tr>
<tr>
<td>K014 Bottoms from the acetonitrile purification column in the production of acrylonitrile.</td>
<td></td>
</tr>
<tr>
<td>K015 Still bottoms from the distillation of benzyl chloride. (See footnote 1, below.)</td>
<td></td>
</tr>
<tr>
<td>K016 Heavy ends or distillation residues from the production of carbon tetrachloride. (See footnote 1, below.)</td>
<td></td>
</tr>
<tr>
<td>Dangerous Waste No.</td>
<td>Sources</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------</td>
</tr>
<tr>
<td>K017</td>
<td>Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin. (See footnote 1, below.)</td>
</tr>
<tr>
<td>K018</td>
<td>Heavy ends from the fractionation column in ethyl chloride production. (See footnote 1, below.)</td>
</tr>
<tr>
<td>K019</td>
<td>Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production. (See footnote 1, below.)</td>
</tr>
<tr>
<td>K020</td>
<td>Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production. (See footnote 1, below.)</td>
</tr>
<tr>
<td>K021</td>
<td>Aqueous spent antimony catalyst waste from fluoromethanes production. (See footnote 1, below.)</td>
</tr>
<tr>
<td>K022</td>
<td>Distillation bottom tars from the production of phenol/acetone from cumene.</td>
</tr>
<tr>
<td>K023</td>
<td>Distillation light ends from the production of phthalic anhydride from naphthalene.</td>
</tr>
<tr>
<td>K024</td>
<td>Distillation bottoms from the production of phthalic anhydride from naphthalene.</td>
</tr>
<tr>
<td>K093</td>
<td>Distillation light ends from the production of phthalic anhydride from ortho-xylene.</td>
</tr>
<tr>
<td>K094</td>
<td>Distillation bottoms from the production of phthalic anhydride from ortho-xylene.</td>
</tr>
<tr>
<td>K025</td>
<td>Distillation bottoms from the production of nitrobenzene by the nitration of benzene.</td>
</tr>
<tr>
<td>K026</td>
<td>Stripping still tails from the production of methyl ethyl pyridines.</td>
</tr>
<tr>
<td>K027</td>
<td>Centrifuge and distillation residues from toluene diisocyanate production.</td>
</tr>
<tr>
<td>K028</td>
<td>Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane. (See footnote 1, below.)</td>
</tr>
<tr>
<td>K029</td>
<td>Waste from the product steam stripper in the production of 1,1,1-trichloroethane. (See footnote 1, below.)</td>
</tr>
<tr>
<td>K095</td>
<td>Distillation bottoms from the production of 1,1,1-trichloroethane. (See footnote 1, below.)</td>
</tr>
<tr>
<td>K096</td>
<td>Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane. (See footnote 1, below.)</td>
</tr>
<tr>
<td>K030</td>
<td>Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene. (See footnote 1, below.)</td>
</tr>
<tr>
<td>K083</td>
<td>Distillation bottoms from aniline production.</td>
</tr>
<tr>
<td>K103</td>
<td>Process residues from aniline extraction from the production of aniline.</td>
</tr>
<tr>
<td>K104</td>
<td>Combined wastewater streams generated from nitrobenzene/aniline production.</td>
</tr>
<tr>
<td>K085</td>
<td>Distillation of fractionation column bottoms from the production of chlorobenzenes. (See footnote 1, below.)</td>
</tr>
<tr>
<td>K105</td>
<td>Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes. (See footnote 1, below.)</td>
</tr>
<tr>
<td>K111</td>
<td>Product washwaters from the production of dinitrotoluene via nitration of toluene.</td>
</tr>
<tr>
<td>K112</td>
<td>Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.</td>
</tr>
<tr>
<td>K113</td>
<td>Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.</td>
</tr>
<tr>
<td>K114</td>
<td>Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.</td>
</tr>
<tr>
<td>K115</td>
<td>Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.</td>
</tr>
<tr>
<td>K116</td>
<td>Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine. (See footnote 1, below.)</td>
</tr>
<tr>
<td><strong>Explosives:</strong></td>
<td></td>
</tr>
<tr>
<td>K044</td>
<td>Wastewater treatment sludges from the manufacturing and processing of explosives.</td>
</tr>
<tr>
<td>K045</td>
<td>Spent carbon from the treatment of wastewater containing explosives.</td>
</tr>
<tr>
<td>K046</td>
<td>Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.</td>
</tr>
<tr>
<td>K047</td>
<td>Pink/red water from TNT operations.</td>
</tr>
<tr>
<td><strong>Inorganic Chemicals:</strong></td>
<td></td>
</tr>
<tr>
<td>K071</td>
<td>Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.</td>
</tr>
<tr>
<td>K073</td>
<td>Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production. (See footnote 1, below.)</td>
</tr>
<tr>
<td>K106</td>
<td>Wastewater treatment sludge from the mercury cell process in chlorine production.</td>
</tr>
</tbody>
</table>
### Dangerous Waste Regulations

#### Sources

<table>
<thead>
<tr>
<th>Dangerous Waste No.</th>
<th>Sources</th>
</tr>
</thead>
</table>

#### Petroleum Refining:
- **KO48** Dissolved air flotation (DAF) float from the petroleum refining industry.
- **KO49** Slop oil emulsion solids from the petroleum refining industry.
- **KO50** Heat exchanger bundle cleaning sludge from the petroleum refining industry.
- **KO51** API separator sludge from the petroleum refining industry.
- **KO52** Tank bottoms (leaded) from the petroleum refining industry.

#### Iron and Steel:
- **KO61** Emission control dust/sludge from the primary production of steel in electric furnaces.
- **KO62** Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).

#### Pesticides:
- **KO31** Byproduct salts generated in the production of MSMA and cacodylic acid.
- **KO32** Wastewater treatment sludge from the production of chlordane. (See footnote 3, below.)
- **KO33** Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. (See footnote 3, below.)
- **KO34** Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. (See footnote 3, below.)
- **KO97** Vacuum stripper discharge from the chlordane clarinator in the production of chlordane. (See footnote 3, below.)
- **KO35** Wastewater treatment sludges generated in the production of creosote.
- **KO36** Still bottoms from toluene reclamation distillation in the production of disulfoton.
- **KO37** Wastewater treatment sludges from the production of disulfoton.
- **KO38** Wastewater from the washing and stripping of phorate production. (See footnote 3, below.)
- **KO39** Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. (See footnote 3, below.)
- **KO40** Wastewater treatment sludge from the production of phorate. (See footnote 3, below.)
- **KO41** Wastewater treatment sludge from the production of toxaphene. (See footnote 3, below.)

#### Secondary Lead:
- **KO69** Emission control dust/sludge from secondary lead smelting.
- **K100** Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.

#### Veterinary Pharmaceuticals:
- **KO84** Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.
- **K101** Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.
- **K102** Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

#### Ink Formulation:
- **KO86** Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead.

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Coking:

K060  Ammonia still-lime sludge from coking operations.

K087  Decanter tank tar sludge from coking operations.

1. These wastes contain or may contain halogenated hydrocarbons. Although WAC 173–303–082 states that these wastes are DW, WAC 173-303-070(5), special knowledge, requires generators who know that their waste contains greater than one percent of these listed halogenated hydrocarbons to designate their waste EHW.

2. For wastes listed with the dangerous waste numbers F020, F021, F022, F023, F026, or F027 the quantity exclusion limit is 2.2 lbs. (1 kg) per month or per batch.

3. These wastes contain or may contain X Category toxic constituents. Although WAC 173–303–082 states that these wastes are DW, WAC 173-303-070(5), special knowledge, requires generators who know that their waste contains greater than 0.1 percent of these listed toxic constituents to designate their waste EHW.

State Sources

The following wastes generated from the salvaging, rebuilding, or discarding of transformers or capacitors which contain polychlorinated biphenyls (PCB): Cooling and insulating fluids; cores, including core papers, from unrisned transformers and capacitors; transformers and capacitors which will no longer be used for their intended use, except for those transformers or capacitors which have been rinsed; and, rinsate from the rinsing of transformers and capacitors. For the purposes of this listing, the rinsing of PCB containing items shall be conducted as follows: First, the item is drained of all free flowing liquid; second, the item is filled with solvent and allowed to stand for at least eighteen hours; last, the item is drained thoroughly and the solvent is collected. Solvents may include kerosene, xylene, toluene and other solvents in which PCB are readily soluble. (Note—Certain PCB wastes are excluded from this listing under WAC 173–303–071(3)(k). The generator should check that section to determine if his PCB waste is excluded from the requirements of chapter 173–303 WAC.)


Acetonitrile [Ethanenitrile]

Acetophenone (Ethanone, 1–phenyl)

-(alpha-Acetonylbenzyl)–4–hydroxycoumarin and salts (Warfarin)

2–Acetylaminofluorene (Acetamide, N–9H–fluoren–2–yl–)

Acetyl chloride (Ethanoyl chloride)

1–Acetyl–2–thiourae (Acetamide, N– (aminothioxomethyl)–)

Acrolein (2–Propenal)

Acrylamide (2–Propenamide)

Acrylonitrile (2–Propenenitrile)

Aflatoxins

Aldrin (1,2,3,4,10–Hexachloro–1,4,5,8–Dimethanonaphthalene)

Allyl alcohol (2–Propen–1–ol)

Aluminum phosphide

4–Aminobiphenyl ([l,l ‘–Biphenyl]–4–amine)

6–Amino–1,1a,2,8,8a,8b–hexahydro–8– (hydroxymethyl)–8a–methoxy–5–methylcarbamate azirino[2',3 ':3,4]pyrrolo[l,2–a]indole–4,7–dione, (ester) (Mitomycin C)

(Azirino [2'3 ': 3,4]pyrrolo(1,2-a)indole-4,7-dione, 6-amino--8[ Kirchenbauer, p. 84) Barium alcohol (2–Propen–1–ol)

Barium cyanide

Benz[c]acridine (3,4–Benzacridine)

Benz[a]anthracene (1,2–Benzanthracene)

Benzene (Cyclohexatriene)

Benzenecarsonic acid (Arsenic acid, phenyl–)

Benzenes, 2–amino–1–methyl (o–Toluidine)

Benzenes, 4–amino–1–methyl (p–Toluidine)

Benzenes, dichloromethyl– (Benzal chloride)

Benzenes, hexachloro (Triphenol)

Benzidine ((1,1’–Biphenyl)–4,4’diamine)

Benzo[b]fluoranthene (2,3–Benzofluoranthene)

Benzo[j]fluoranthene (7,8–Benzofluoranthene)

Benzo[a]pyrene (3,4–Benzopyrene)

p Benzquinone (1,4–Cyclohexadienedione)

Benzo(b)fluoranthene (Benzene, trichloromethyl–)

Benzyl chloride (Benzene, (chloromethyl)–)

Beryllium and compounds, N.O.S.*

Barium and compounds, N.O.S.*

Barium cyanide

Benz[c]acridine (3,4–Benzacridine)

Benz[a]anthracene (1,2–Benzanthracene)

Benzene (Cyclohexatriene)

Benzenecarsonic acid (Arsenic acid, phenyl–)

Benzenes, 2–amino–1–methyl (o–Toluidine)

Benzenes, 4–amino–1–methyl (p–Toluidine)

Benzenes, dichloromethyl– (Benzal chloride)

Benzenes, hexachloro (Triphenol)

Benzidine ((1,1’–Biphenyl)–4,4’diamine)

Benzo[b]fluoranthene (2,3–Benzofluoranthene)

Benzo[j]fluoranthene (7,8–Benzofluoranthene)

Benzo[a]pyrene (3,4–Benzopyrene)

p Benzquinone (1,4–Cyclohexadienedione)

Benzo(b)fluoranthene (Benzene, trichloromethyl–)

Benzyl chloride (Benzene, (chloromethyl)–)

Beryllium and compounds, N.O.S.*
Bis(chloromethyl) ether (Methane, oxybis[chloro-])
Bis(2-ethylhexyl) phthalate (1,2-
Benzenedicarboxylic acid, bis(2-
ethylhexyl) ester)
Bromoacetone (2-Propanone, 1-bromo–)
Bromomethane (Methyl bromide)
4-Bromophenyl phenyl ether (Benzene, 1-
bromo-4-phenoxy–)
Brucine (Strychnidin–10-one, 2,3-dimethoxy–)
2-Butanone peroxide (Methyl ethyl ketone,
peroxide)
Butyl benzyl phthalate (1,2-
Benzenedicarboxylic acid, butyl
phenylmethyl ester)
2-sec-Butyl-4,6-dinitrophenol (DNBP) (Phenol,
2,4-dinitro-6-(1-methylpropyl)–)
Cadmium and compounds, N.O.S.*
Calcium chromate (Chromic acid, calcium
salt)
Calcium cyanide
Carbon disulfide (Carbon bisulfide)
Carbon oxyfluoride (Carbonyl fluoride)
Chloral (Acetaldehyde, trichloro–)
Chlorambucil (Butanoic acid, 4-[bis(2-
chloroethyl)amino]benzene–)
Chlordane (alpha and gamma isomers) (4,7-
Methanoindan, 1,2,4,5,6,7,8,8-octachloro-
3,4,7,7a-tetrahydro–) (alpha and gamma
isomers)
Chlorinated benzenes, N.O.S.*
Chlorinated ethane, N.O.S.*
Chlorinated fluorocarbons, N.O.S.*
Chlorinated naphthalene, N.O.S.*
Chlorinated phenol, N.O.S.*
Chloroacetaldehyde (Acetaldehyde, chloro–)
Chloroalkyl ethers, N.O.S.*
P-Chloroaniline (Benzenamine, 4-chloro–)
Chlorobenzene (Benzene, chloro–)
Chlorobenzilate (Benzeneacetic acid, 4-
chloro-alpha-(4-chlorophenyl)-alpha-
hydroxy-,ethyl ester)
2-Chloro-1,3-butadiene
p-Chloro-m-cresol (Phenol, 4-Chloro-3-methyl)
1-Chloro-2,3-epoxypropane (Oxirane, 2-
(chloromethyl)–)
2-Chloroethyl vinyl ether (Ethene, (2-
chlooroethoxy)–)
Chloroform (Methane, trichloro–)
Chloromethane (Methyl chloride)
Chloromethyl methyl ether (Methane,
chloromethoxy–)
2-Chloronaphthalene (Naphthalene, beta-
chloro–)
2-Chlorophenol (Phenol, o-chloro–)
1-(o-Chlorophenyl)thiourea (Thiourea, (2-
chlorophenyl)–)
3-Chloropropene
3-Chloropropionitrile (Propanenitrile, 3-
chloro–)
Chromium and compounds, N.O.S.*

Chrysene (1,2-Benzphenanthrene)
Citrus red No. 2 (2-Naphthol, 1-[2,5-
dimethoxyphenyl]azo–)
Coal tars
Copper cyanide
Croosote (Croosote, wood)
Cresols (Cresylic acid) (Phenol, methyl–
Crotonaldehyde (2-Butenal)
Cyanides (soluble salts and complexes),
N.O.S.*
Cyanogen (Ethanedinitrile)
Cyanogen bromide (Bromine cyanide)
Cyanogen chloride (Chlorine cyanide)
Cycasin (beta-D-Glucopyranoside, (methyl-
ONN-azoxy)methyl–)
2-Cyclohexyl-4,6-dinitrophenol (Phenol, 2-
cyclohexyl-4,6-dinitro–)
Cyclophosphamide (CH1,3,2,–
Oxazaphosphorine, [bis(2-
chloroethyl)amino]-tetrahydro–, 2-oxide)
Daunomycin (5,12-Naphthacenedione, (8S-
cis–)8-acetyl-10-[3-amino-2,3,6-trideoxy-
alpha-L-lyxo-hexopyranosyl]oxy]-7,8,9,10-
tetrahydro-6,8,11-trihydroxy-1-methoxy–)
DDD (Dichlorodiphenyldichloroethane)
(Ethane, 1,1-dichloro-2,2-bis(p
chlorophenyl)–)
DDE (Ethylene, 1,1-dichloro-2,2-bis(4-
chlorophenyl)–)
DDT (Dichlorodiphenyltrichloroethane)
(Ethane, 1,1-trichloro-2,2-bis(p-
chlorophenyl)–)
Diallate (S-(2,3-dichloroallyl)
diisopropylthiocarbamate)
Dibenzo[a,h]acridine (1,2,5,6-Dibenzacridine)
Dibenzo[a,j]acridine (1,2,7,8-Dibenzacridine)
Dibenzo[a,h]anthracene (1,2,5,6-
Dibenzoanthracene)
7H-Dibenzo[c,g]carbazole (3,4,5,6-
Dibenzocarbazole)
Dibenzo[a,e]pyrene (1,2,4,5-Dibenzpyrene)
Dibenzo[a,h]pyrene (1,2,5,6-Dibenzpyrene)
Dibenzo[a,j]pyrene (1,2,7,8-Dibenzpyrene)
1,2-Dibromo-3-chloropropene (Propane, 1,2-
dibromo-3-chloro–)
1,2-Dibromomethane (Ethylene dibromide)
Dibromomethane (Methylene bromide)
Di-n-butyl phthalate (1,2-Benzenedicarboxylic
acid, dibutyl ester)
o-Dichlorobenzene (Benzene, 1,2-dichloro–)
m-Dichlorobenzene (Benzene, 1,3-dichloro–)
p-Dichlorobenzene (Benzene, 1,4-dichloro–)
Dichlorobenzene, N.O.S.* (Benzene,
dichloro–, N.O.S.)*
3,3'-Dichlorobenzidine (1,1'-Biphenyl)-4,4'-
diamine, 3,3'-dichloro–)
1,4-Dichloro-2-butene (2-Butene, 1,4-Butene, 1,4-
dichloro–)

1,1-Dichloroethane (Ethylidene dichloride)
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1,2-Dichloroethane (Ethylene dichloride)  
trans-1,2-Dichloroethene (1,2-Dichloroethylene)

Dichloroethylene, N.O.S. (Ethene, dichloro-, N.O.S.)*

1,1-Dichloroethylene (Ethene, 1,1-dichloro-)

Dichloromethane (Methylene chloride)

2,4-Dichlorophenol (Phenol, 2,4-dichloro-)

2,6-Dichlorophenol (Phenol, 2,6-dichloro-)

2,4-Dichlorophenoxyacetic acid (2,4-D), salts and esters (Acetic acid, 2,4-dichlorophenoxy-, salts and esters)

Dichlorophenylarsine (Phenyl dichloroarsine)

1,2-Dichloropropane (Propylene dichloride)

Dichloropropene, N.O.S. (Propene, dichloro-, N.O.S.)*

1,3-Dichloropropene, (1-Propene, 1,3-dichloro-)

Dieldrin (1,2,3,4,10,10-hexachloro--6,7-epoxy-1,4,4a,5,6,7,8,8a-octa-hydro-endo,exo-1,4,5,8-Dimethanonaphthalene)

1,2-Dichloropropene, (1-Propene, 1,3-dichloro-)

Diethylarsonic acid (Arsine, diethyl-)

N,N-Diethylhydrazine (Hydrazine, 1,2-diethyl)

1,1-Dimethylhydrazine (Hydrazine, 1,1-dimethyl-)

1,2-Dimethylhydrazine (Hydrazine, 1,2-dimethyl-)

3,3-Dimethyl-1-(methylthio)-2--butanone, O-[(methylamino) carbonyl]oxime (Thiofuranox)

alpha, alpha-Dimethylphenethylamine (Ethanamine, 1,1-dimethyl-2-phenyl)

2,4-Dimethylphenol (Phenol, 2,4-dimethyl-)

Dimethyl phthalate (1,2-Benzenedicarboxylic acid, dimethyl ester)

Dimethyl sulfate (Sulfuric acid, dimethyl ester)

Dinitrobenzene, N.O.S. (Benzene, dinitro-, N.O.S.)*

4,6-Dinitro-o-cresol and salts (Phenol, 2,4-dinitro-6-methyl-, and salts)

2,4-Dinitrophenol (Phenol, 2,4-dinitro-)

2,6-Dinitrotoluene (Benzene, 1-methyl-2,6-dinitro-)

Di-n--octyl phthalate (1,2-Benzenedicarboxylic acid, dioctyl ester)

1,4-Dioxane (1,4-Diethylene oxide)

Diphenylamine (Benzenamine, N-Phenyl-)

1,2-Diphenylhydrazine (Hydrazine, 1,2-diphenyl-)

Di-n-propylmitrosamine (N-Nitroso-di-n-propylamine)

Disulfoton (0,0-diethyl S-[2-(ethylthio)ethyl] phosphorodithioate)

2,4-Dithiobiuret (Thiimidodicarbonic diamide)

Endosulfan (5-Norbornene, 2,3-dimethanol, 1,4,5,6,7,7-hexachloro-, cyclic sulfite)

Endrin and metabolites (1,2,3,4,10,10-hexachloro--6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,exo-1,4,5,8-Dimethanonaphthalene, and metabolites)

Ethyl carbamate (Urethan) (Carbamic acid, ethyl ester)

Ethyl cyanide (Propanenitrile)

Ethylcarbodiimidecarboxylic acid, salts and esters (1,2-Ethanediylbiscarbamodithioic acid, salts and esters)

Ethyleneimine (Aziridine)

Ethylene oxide (Oxirane)

Ethlenediaminotetraacetic acid (2-Imidazolidinethione)

Ethylacrylate (2-Propenoic acid, 2-methyl-, ethyl ester)

Ethyl methanesulfonate (Methanesulfonic acid, ethyl ester)

Ethyl mercaptan (Propanethiol)

Ethylenebisdithiocarbamic acid, salts and esters (1,2-Ethanediylbiscarbamodithioic acid, salts and esters)

Ethyleneimine (Aziridine)

Ethylene oxide (Oxirane)

Ethlenediarmine (2-Imidazolidinethione)

Ethylmethacrylate (2-Propenoic acid, 2-methyl-, ethyl ester)

Ethyl methanesulfonate (Methanesulfonic acid, ethyl ester)

Fluoranthene (Benzol[j,k]fluorene)

Fluorine

2-Fluoropropionamide (Acetamide, 2-fluoro-)

Fluoroacetic acid, sodium salt (Acetic acid, fluoro-, sodium salt)
Formaldehyde (Methylene, oxide)  
Formic acid (Methanoic acid)  
Glycidylaldehyde (1-Propanol-2-3-epoxy)  
Halomethane, N.O.S.*  
Heptachlor (4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-)  
Heptachlor epoxide (alpha, beta, and gamma isomers) (4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7-tetrahydro- alpha, beta and gamma isomers)  
Hexachlorobenzene (Benzene, hexachloro-)  
Hexachlorobutadiene (1,3-Butadiene, 1,1,2,3,4,4-hexachloro-)  
Hexachlorocyclohexane (all isomers) (Lindane and isomers)  
Hexachlorocyclopentadiene (1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-)  
Hexachlorodibenzo-p-dioxins  
Hexachlorodibenzofurans  
Hexachloroethane (Ethane, 1,1,1,2,2,2-hexachloro-)  
1,2,3,4,10-Hexachloro-1,4,4a,5,8,8a-hexahydro--1,4:5,8-endo,endo-dimethanonaphthalene (Hexachlorohexahydro--endo,endo-dimethanonaphthalene)  
Hexachlorophene (2,2'-Methylenebis(3,4,6-trichlorophenol))  
Hexachloropropene (1-Propene, 1,1,2,3,3,3-hexachloro-)  
Hexaethyl tetraphosphate (Tetraphosphoric acid, hexaethyl ester)  
Hydrazine (Diamine)  
Hydrocyanic acid (Hydrogen cyanide)  
Hydrofluoric acid (Hydrogen fluoride)  
Hydrogen sulfide (Sulfur hydride)  
Hydroxydimethylarsine oxide (Cacodylic acid)  
Indeno(1,2,3-cd)pyrene (1,10-(1,2-phenylene)pyrene)  
Iodomethane (Methyl iodide)  
Iron Dextran (Ferric dextran)  
Isocyanic acid, methyl ester (Methyl isocyanate)  
Isobutyl alcohol (1-Propanol, 2-methyl-)  
Isosafrole (Benzene, 1,2-methylenedioxy-4-allyl-)  
Kepone (Decachlorooctahydro-1,3,4-Methano-2H-cyclobuta[cd]pentalen-2-one)  
Lasicarpine (2-Butenoic acid, 2-methyl-7-[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy)methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester)  
Lead and compounds, N.O.S.*  
Lead acetate (Acetic acid, lead salt)  
Lead phosphate (Phosphoric acid, lead salt)  
Lead subacetate (Lead, bis(acetato-O)tetrahydroxytripro-4 Sulfur hydride)  
Maleic anhydride (2,5-Furandione)  
Maleic hydrazide (1,2-Dihydro-3,6-pyridazinedione)  
Malononitrile (Propanenitrile)  
Melphanal (Alanine, 3-[p-bis(2-chloroethyl)amino]phenyl-L)  
Mercury Fulminate (Fulminic acid, mercury salt)  
Mercury and compounds, N.O.S.*  
Methacrylonitrile (2-Propenenitrile, 2-methyl-)  
Methanethiol (Thiomethanol)  
Methapyrline (Pyridine, 2-[(2-dimethylamino)ethyl]-2-thylenimino-)  
Methanol (Acetimidic acid, N-[methylcarbamoyloxy]thio--methyl ester)  
Metoxycchior (Ethane, 1,1,1-trichloro-2,2-bis(p-methoxyphenyl)-)  
2-Methylaziridine (1,2-Propylenimine)  
3-Methylcholanthrene (Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-)  
Methyl chlorocarbonate (Carbonochloridic acid, methyl ester)  
4,4'-Methylenebis(2-chloroaniline) (Benzenamine, 4,4'-methylenbis(2-chloro-)  
Methyl ethyl ketone (MEK) (2-Butanone)  
Methyl hydrazine (Hydrazine, methyl-)  
2-Methylactonitrile (Propanenitrile, 2-hydroxy-2-methyl-)  
Methyl methacrylate (2-Propanoic acid, 2-methyl-, methyl ester)  
Methyl methanesulfonate (Methanesulfonic acid, methyl ester)  
2-Methyl-2-(methylthio)propionaldehyde-o-(methylcarboxylo) oxime (Propanal,2-methyl-2-(methylthio)-, O-[(methylamino)carboxylo]oxime)  
N-Methyl--N'-nitro--N-nitrosoguanidine (Guanidine, N-nitros--N-methyl-N'nitro)  
Methyl parathion (O,O-dimethyl O-(4-nitrophenoxy) phosphorothioate)  
Methylthiouracil (4-H-Pyrimidinone, 2,3-dihydro-6-methyl-2-thiolo-)  
Mustard gas (Sulfide, bis(2-chloroethyl)-)  
Naphthalene 1,4-Naphthoquinone (1,4-Naphthalenedione)  
1-Naphthylamine (alpha-Naphthylamine)  
2-Naphthylamine (beta-Naphthylamine)  
1-Naphthyl-2-thioureia (Thiourea, 1-naphthalenyl-)  
Nickel and compounds, N.O.S.*  
Nickel carbonyl (Nickel tetracarbonyl)  
Nickel cyanide (nickel (II) cyanide)  
Nicotine and salts, Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts  
Nitric oxide (Nitrogen (II) oxide)  
Nitrobenzene (Benzene, nitro-)  
Nitrobenzene (Benzene, nitro-)  
Nitrogen dioxide (Nitrogen (IV) oxide)  
Nitrogen mustard and hydrochloride salt (Ethaneamine, 2-chloro-, N-(2-chloethoxy)-N-methyl-, and hydrochloride salt)
Nitrogen mustard N-Oxide and hydrochloride salt (Ethanamine, 2-chloro-, N-(2-chloroethyl)-N-methyl-, and hydrochloride salt)
Nitroglycerine (1,2,3-Propanetriol, trinitrate)
4-Nitrophenol (Phenol, 4-nitro-)
4-Nitroquinoline-1-oxide (Quinoline, 4-nitro-1-oxide)
Nitrosamine, N.O.S.*
N-Nitrosodi-n-butylamine (1-Butanamine, N-butyl-N-nitroso-)
N-Nitrosodietanolamine (Ethanol, 2,2'- (nitrosoimino)bis-)
N-Nitrosodimethylamine (Dimethylnitrosamine)
N-Nitrosodimethylurethane (Carbamic acid, methylthio, ethyl ester)
N-Nitrosomethylvinylamine (Ethlenamine, N-methyl-N-nitroso-)
N-Nitrosomorpholine (Morpholine, N-nitroso-)
N-Nitrososacrosine (Sarcosine, N-nitroso-)
5-Nitro-o-toluidine (Benzenamine, 2-methyl-5-nitro-)
Octamethylpyrophosphoramide (Diphosphoramidine, octamethyl-)
Osmium tetroxide (Osmium (VIII) oxide)
7-Ocabicyclo[2.2.1]heptane-2,3-dicarbonxylic acid (Endothal)
Paraaldehyde (1,3,5-Trioxane, 2,4,6-trinethyl-)
Parathion (Phosphorothioic acid, O,O-diethyl S-[(ethylthio)ethyl] ester (Phorate)
Phosphorothioic acid, O,O-dimethyl O-[p-((dimethylamino)sulfonyl)phenyl] ester (Famphur)
Phthalic acid esters, N.O.S.* (Benzene, 1,2-dicarboxylic acid, esters, N.O.S.)*
Phthalic anhydride (1,2-Benzenedicarboxylic acid anhydride)
2-Picoline (Pyridine, 2-methyl-)
Polychlorinated biphenyl, N.O.S.*
Potassium cyanide
Potassium silver cyanide (Argentate(1-), dicyano-, potassium)
Promamide (3,5-Dichloro-N-(1,1-dimethyl-2-propynyl)benzamide)
1,3-Propanesultone (1,2-Oxathiolane, 2,2-dioxide)
n-Propylamine (1-Propane)
Propylthiouracil (Undecamethylenediamine, N,N'-bis(2-chlorobenzyl)-, dihydrochloride)
2-Propyn-1-ol (Propargyl alcohol)
Pyridine
Reserpine (Yohimb–16-carboxylic acid, 11,17-dimethoxy–18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester)
Resorcinol (1,3-Benzenediol)
Saccharin and salts (1,2-Benzosothiazolin–3-one, 1,1-dioxide, and salts)
Safrol (Benzene, 1,2-methylenedioxy–4-allyl–)
Selenium and compounds, N.O.S.*
Silver and compounds, N.O.S.*
Silver cyanide
Sodium cyanide
Streptozotocin (D-Glucopyranose, 2-deoxy–2-(3-methyl–3-nitrosoureido–)
Strontium sulfide
Strophanthin and salts (Strophanthin–10-one, and salts)
1,2,4,5-Tetrachlorobenzene (Benzene, 1,2,4,5-tetrachloro–)
Tetrachlorodibenz–p–dioxins
Tetrachlorodibenzofuranurs
2,3,7,8-Tetrachlorodibenzo–p–dioxin (TCDD)
Dibenzo–p–dioxin, 2,3,7,8-tetrachloro–
Tetrachloroethane, N.O.S.* (Ethane, tetrachloro–, N.O.S.*
1,1,1,2–Tetrachlorehthane (Ethane, 1,1,1,2-tetrachloro–)
1,1,2,2–Tetrachlorehthane (Ethane, 1,1,2,2-tetrachloro–)
Tetrachloroethylene (Ethane, 1,1,2,2–tetrachloro–)
Tetrachloromethane (Carbon tetrachloride)
2,3,4,6-Tetrachlorophenol (Phenol, 2,3,4,6-tetrachloro–)
Tetraethylthiophosphorophosphate (Dithiophosphoric acid, tetraethyl–ester)
Tetraethyl lead (Plumbane, tetraethyl–)
Tetraethylpyrophosphate (Pyrophosphoric acid, tetraethyl ester)
Tetranitromethane (Methane, tetranitro–)
Thallium and compounds, N.O.S.*
Thalic oxide (Thallium (III) oxide)
Thallium (I) acetate (Acetic acid, thallium (I) salt)
Thallium (I) carbonate (Carbonic acid, dithallium (I) salt)
Thallium (I) chloride
Thallium (I) nitrate (Nitric acid, thallium (I) salt)
Thallium selenite
Thallium (I) sulfate (Sulfuric acid, thallium (I) salt)
Thioacetamide (Ethanethioamide)
Thiosemicarbazide (Hydrazinecarbothioamide)
Thiourea (Carbamide thio–)
Thiuram (Bis(dimethylthioucarbamoyl) disulfide)
Toluene (Benzene, methyl–)
Toluenediamine, N.O.S. (Diaminotoluene)
2,4-Toluenediamine
2,6-Toluenediamine
3,4-Toluenediamine
o-Toluidine hydrochloride (Benzenamine, 2-methyl–, hydrochloride)
Tolyene disocyanate (Benzene, 1,3-diisocyanatomethyl–)
Toxaphene (Camphene, octachloro–)
Trichloromethane (Bromoform)
1,2,4-Trichlorobenzene (Benzene, 1,2,4-trichloro–)
1,1,1-Trichloroethane (Methyl chloroform)
1,1,2-Trichloroethane (Ethane, 1,1,2-trichloro–)
Trichloroethene (Trichloroethylene)
Trichloromethanethiol (Methanethiol, trichloro–)
Trichloropropane, N.O.S.* (Propane, trichloro–)
O,O,O-Triethyl phosphorothioate (Phosphorothioic acid, O,O,O-triethyl ester)
sym–Trinitrobenzene (Benzene, 1,3,5-trinitro–)
Tris(1-aziridinyl) phosphine sulfide (Phosphine sulfide, tris(1-aziridinyl–)
Tris(2,3-dibromopropyl) phosphate (1-Propanol, 2,3-dibromo–, phosphate)

Trypan blue (2,7-Naphthalenedisulfonic acid, 3,3′-[(3,3′-dimethyl(1,1′-biphenyl)-4,4′-diyl)bis(azo)]bis(5-amino-4-hydroxy–, tetrasodium salt)
Uracil mustard (Uracil 5-[bis(2-chlorethyl)amino]–)
Vanadic acid, ammonium salt (ammonium vanadate)
Vanadium pentoxide (Vanadium (V) oxide)
Vinyl chloride (Ethane, chloro–)
Zinc cyanide
Zinc phosphate

*The abbreviation N.O.S. signifies those members of the general class "not otherwise specified" by name in this listing.


Reviser’s note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

WAC 173-303-9907 Persistent dangerous waste mixtures graph.

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<th>TOTAL POLYCYCLIC AROMATIC HYDROCARBON CONCENTRATION (%)</th>
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DW (HH ONLY)  EHW
400,000 or more
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Chapter 173-304 WAC
MINIMUM FUNCTIONAL STANDARDS FOR SOLID WASTE HANDLING

WAC 173-304-012 Planning requirements for energy recovery or incineration facilities. In order to implement the priorities and provide a basis for permit requirements established in chapter 70.95 RCW, each comprehensive solid waste management plan shall contain an analysis for waste reduction and recycling. The analysis will include a determination of levels of waste reduction and recycling which could occur for solid wastes that are proposed to be landfilled or incinerated. The analysis shall include: A description of markets for recycled material, a review of waste generation trends, a description of waste composition, a cost analysis of the impact of recycling or reduction programs on collection and disposal rates and a discussion and description of any additional programs needed to assist public and private sector recycling programs.

WAC 173-304-100 Definitions. When used in this regulation, the following terms have the meanings given below.

1. "Active area" means that portion of a facility where solid waste recycling, reuse, treatment, storage, or disposal operations are being, are proposed to be, or have been conducted. Buffer zones shall not be considered part of the active area of a facility.

2. "Agricultural wastes" means wastes on farms resulting from the production of agricultural products including but not limited to manures, and carcasses of dead animals weighing each or collectively in excess of fifteen pounds.

3. "Agronomic rates" means the rates of application of sludges, manures, or crop residues in accordance with rates specified by the appropriate fertilizer guide for the crop under cultivation.

4. "Air quality standard" means a standard set for maximum allowable contamination in ambient air as set forth in chapter 173-400 WAC, General regulations for air pollution sources.

5. "Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of ground water to wells or springs.

6. "Ashes" means the residue including any air pollution flue dusts from combustion or incineration of material including solid wastes.

7. "Balefill" means a landfill which uses compacted bales of solid waste to form discrete lifts as the landfill is filled.

8. "Buffer zone" means that part of a facility that lies between the active area and the property boundary.

9. "Bulky waste" means large items of refuse, such as appliances, furniture, and other oversize wastes which would typically not fit into reusable or disposable containers.

10. "Clean soils and clean dredge spoils" means soils and dredge spoils which are not dangerous wastes or problem wastes as defined in this section.

11. "Closure" means those actions taken by the owner or operator of a solid waste site or facility to cease disposal operations and to ensure that all such facilities are closed in conformance with applicable regulations at the time of such closures and to prepare the site for the post-closure period.

12. "Collecting agency" means any agency, business or service operated by a person for the collecting of solid waste.

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(13) "Compliance schedule" means a written schedule of required measures in a permit including an enforceable sequence leading to compliance with these regulations.

(14) "Composting" means the controlled degradation of organic solid waste yielding a product for use as a soil conditioner.

(15) "Container" means a device used for the collection, storage, and/or transportation of solid waste including but not limited to reusable containers, disposable containers, detachable containers and tanks, fixed or detachable.

(16) "Contaminate" means to allow to discharge a substance into ground water that would cause:

(a) The concentration of that substance in the ground water to exceed the maximum contamination level specified in WAC 173–304–9901, or

(b) A statistically significant increase in the concentration of that substance in the ground water where the existing concentration of that substance exceeds the maximum contaminant level specified in WAC 173–304–9901, or

(c) A statistically significant increase above background in the concentration of a substance which:

(i) Is not specified in WAC 173–304–9901, and

(ii) Is present in the solid waste, and

(iii) Has been determined to present a substantial risk to human health or the environment in the concentrations found at the point of compliance by the jurisdictional health department in consultation with the department and the department of social and health services.

(17) "Cover material" means soil or other suitable material that has been approved by the jurisdictional health department as cover for wastes.

(18) "Dangerous wastes" means any solid waste designated as dangerous waste by the department under chapter 173–303 WAC.

(19) "Demolition waste" means solid waste, largely inert waste, resulting from the demolition or razing of buildings, roads and other man–made structures. Demolition waste consists of, but is not limited to, concrete, brick, bituminous concrete, wood and masonry, composition roofing and roofing paper, steel, and minor amounts of other metals like copper. Plaster (i.e., sheet rock or plaster board) or any other material, other than wood, that is likely to produce gases or a leachate during the decomposition process and asbestos wastes are not considered to be demolition waste for the purposes of this regulation.

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

(21) "Detachable containers" means reusable containers that are mechanically loaded or handled such as a "dumpster" or drop box.

(22) "Disposable containers" means containers that are used once to handle solid waste such as plastic bags, cardboard boxes and paper bags.

(23) "Disposal" or "deposition" means the discharge, deposit, injection, dumping, leaking, or placing of any solid waste into or on any land or water.

(24) "Disposal site" means the location where any final treatment, utilization, processing, or deposition of solid waste occurs. See also the definition of interim solid waste handling site.

(25) "Drop box facility" means a facility used for the placement of a detachable container including the area adjacent for necessary entrance and exit roads, unloading and turn–around areas. Drop box facilities normally serve the general public with loose loads and receive waste from off–site.

(26) "Energy recovery" means the recovery of energy in a useable form from mass burning or refuse derived fuel incineration, pyrolysis or any other means of using the heat of combustion of solid waste that involves high temperature (above twelve hundred degrees Fahrenheit) processing.

(27) "Existing facility" means a facility which is owned or leased, and in operation, or for which construction has begun, on or before the effective date of this regulation and the owner or operator has obtained permits or approvals necessary under federal, state and local statutes, regulations and ordinances. A facility has commenced construction if either:

(a) A continuous on–site physical construction program has begun; or

(b) The owner or operator has entered into contractual obligations which cannot be cancelled or modified without substantial financial loss for physical construction of the facility to be completed within a reasonable time.

Lateral extensions of a landfill's active area on land purchased and permitted by the jurisdictional health department for the purpose of landfilling before the effective date of this regulation shall be considered existing facilities.

(28) "Expanded facility" means a facility adjacent to an existing facility for which the land is purchased and approved by the jurisdictional health department after the effective date of this regulation. A vertical expansion approved and permitted by the jurisdictional health department after the effective date of this regulation shall also be considered an expanded facility.

(29) "Facility" means all contiguous land (including buffer zones) and structures, other appurtenances, and improvements on the land used for solid waste handling.

(30) "Facility structures" means buildings, sheds, utility lines, and drainage pipes on the facility.

(31) "Final treatment" means the act of processing or preparing solid waste for disposal, utilization, reclamation, or other approved method of use.

(32) "Free liquids" means any sludge which produces measurable liquids when the Paint Filter Liquids Test, Method 9095 of EPA Publication Number SW–846, is used.

(33) "One hundred year floodplain" means any land area which is subject to one percent or greater chance of flooding in any given year from any source.

(34) "Garbage" means unwanted animal and vegetable wastes and animal and vegetable wastes resulting from the handling, preparation, cooking and consumption of food, swill and carcasses of dead animals, and of
TRACTING or providing food for vectors, except sewage and sewage sludge.

(35) "Ground water" means that part of the subsurface water which is in the zone of saturation.

(36) "Holocene fault" means a fracture along which rocks on one side have been displaced with respect to those on the other side and that has occurred in the most recent epoch of the quaternary period extending from the end of the pleistocene to the present.

(37) "Incineration" means reducing the volume of solid wastes by use of an enclosed device using controlled flame combustion.

(38) "Interim solid waste handling site" means any interim treatment, utilization or processing site engaged in solid waste handling which is not the final site of disposal. Transfer stations, drop boxes, baling and compaction sites, source separation centers, and treatment are considered interim solid waste handling sites.

(39) "Industrial solid wastes" means waste by-products from manufacturing operations such as scraps, trimmings, packing, and other discarded materials not otherwise designated as dangerous waste under chapter 173-303 WAC.

(40) "Inert wastes" means noncombustible, nondangerous solid wastes that are likely to retain their physical and chemical structure under expected conditions of disposal, including resistance to biological attack and chemical attack from acidic rainwater.

(41) "Jurisdictional health department" means city, county, city-county or district public health department.

(42) "Landfill" means a disposal facility or part of a facility at which solid waste is permanently placed in or on land and which is not a landspreading disposal facility.

(43) "Landspreading disposal facility" means a facility that applies sludges or other solid wastes onto or incorporates solid waste into the soil surface at greater than vegetative utilization and soil conditioners/immobilization rates.

(44) "Leachate" means water or other liquid that has been contaminated by dissolved or suspended materials due to contact with solid waste or gases therefrom.

(45) "Local fire control agency" means a public or private agency or corporation providing fire protection such as a local fire department, the department of natural resources or the United States Forest Service.

(46) "Lower explosive limits" means the lowest percentage by volume of a mixture of explosive gases which will propagate a flame in air at twenty-five degrees centigrade and atmospheric pressure.

(47) "Medical waste" means all the infectious, and injurious waste originating from a medical, veterinary, or intermediate care facility.

(48) "New facility" means a facility which begins operation or construction after the effective date of this regulation (see also definition of "existing facility").

(49) "Nonconforming site" means a solid waste handling facility which does not currently comply with the facility requirements of WAC 173-304-400 but does comply with a compliance schedule issued in a solid waste permit by the jurisdictional health department.

(50) "Nuisance" consists in unlawfully doing an act, or omitting to perform a duty, which act or omission either annoys, injures, or endangers the comfort, repose, health or safety of others, offends decency, or unlawfully interferes with, obstructs or tends to obstruct, any lake or navigable river, bay, stream, canal, or basin, or any public park, square, street or highway; or in any way renders others persons insecure in life, or in the use of property.

(51) "Open burning" means the burning of solid waste materials in an open fire or an outdoor container without providing for the control of combustion or the control of emissions from the combustion.

(52) "Performance standard" means the criteria for the performance of solid waste handling facilities.

(53) "Permeability" means the ease with which a porous material allows liquid or gaseous fluids to flow through it. For water, this is usually expressed in units of centimeters per second and termed hydraulic conductivity. Soils and synthetic liners with a permeability for water of $1 \times 10^{-7}$ cm/sec or less may be considered impermeable.

(54) "Permit" means an authorization issued by the jurisdictional health department which allows a person to perform solid waste activities at a specific location and which includes specific conditions for such facility operations.

(55) "Person" means an individual, firm, association, copartnership, political subdivision, government agency, municipality, industry, public or private corporation, or any other entity whatsoever.

(56) "Pile" means any noncontainerized accumulation of solid waste that is used for treatment or storage.

(57) "Plan of operation" means the written plan developed by an owner or operator of a facility detailing how a facility is to be operated during its active life and during closure and post-closure.

(58) "Point of compliance" means that part of ground water that lies beneath the perimeter of a solid waste facilities' active area as that active area would exist at closure of the facility.

(59) "Post-closure" means the requirements placed upon disposal sites after closure to ensure their environmental safety for at least a twenty-year period or until the site becomes stabilized (i.e., little or no settlement, gas production, or leachate generation).

(60) "Premises" means a tract or parcel of land with or without habitable buildings.

(61) "Problem wastes" means: (a) Soils removed during the cleanup of a remedial action site, or a dangerous waste site closure or other cleanup efforts and actions and which contain harmful substances but are not designated dangerous wastes, or (b) dredge spoils resulting from the dredging of surface waters of the state where contaminants are present in the dredge spoils at concentrations not suitable for open water disposal and the dredge spoils are not dangerous wastes and are not regulated by section 404 of the Federal Clean Water Act (PL 95-217).
(62) "Processing" means an operation to convert a solid waste into a useful product or to prepare it for disposal.

(63) "Putrescible waste" means solid waste which contains material capable of being decomposed by micro-organisms.

(64) "Pyrolysis" means the process in which solid wastes are heated in an enclosed device in the absence of oxygen to vaporization, producing a hydrocarbon-rich gas capable of being burned for recovery of energy.

(65) "Reclamation site" means a location used for the processing or the storage of recycled waste.

(66) "Reusable containers" means containers that are used more than once to handle solid waste such as garbage cans.

(67) "Run-off" means any rainwater, leachate or other liquid which drains over land from any part of the facility.

(68) "Run-on" means any rainwater or other liquid which drains over land onto any part of a facility.

(69) "Scavenging" means the removal of materials at a disposal site, or interim solid waste handling site without the approval of the owner or operator and the jurisdictional health department.

(70) "Septage" means a semisolid consisting of settled sewage solids combined with varying amounts of water and dissolved materials generated from a septic tank system.

(71) "Sludge" means a semisolid substance consisting of settled sewage solids combined with varying amounts of water and dissolved materials generated from a wastewater treatment plant or other source.

(72) "Sole source aquifer" means an aquifer designated by the Environmental Protection Agency pursuant to Section 1424e of the Safe Drinking Water Act (PL 93-523).

(73) "Solid waste" means all putrescible and nonputrescible solid and semisolid wastes, including but not limited to garbage, rubbish, ashes, industrial wastes, swill, demolition and construction wastes, abandoned vehicles or parts thereof, and discarded commodities. This includes all liquid, solid and semisolid, materials which are not the primary products of public, private, industrial, commercial, mining, and agricultural operations. Solid waste includes but is not limited to sludge from wastewater treatment plants and septicage, from septic tanks, woodwaste, dangerous waste, and problem wastes.

(74) "Solid waste handling" means the management, storage, collection, transportation, treatment, utilization, processing or final disposal of solid wastes, including the recovery and recycling of materials from solid wastes, the recovery of energy resources from such wastes or the conversion of the energy in such wastes to more useful forms or combinations thereof.

(75) "Solid waste management" means the systematic administration of activities which provide for the collection, source separation, storage, transportation, transfer, processing, treatment, and disposal of solid waste.

(76) "Storage" means the holding of solid waste materials for a temporary period.

(77) "Twenty-five year storm" means a storm of a particular duration and of such an intensity that it has a four percent probability of being equalled or exceeded each year.

(78) "Twenty-four hour, twenty-five year storm" means a twenty-five year storm of twenty-four hours duration.

(79) "Stream" means the point at which any confined freshwater body of surface water reaches a mean annual flow of twenty cubic feet per second.

(80) "Surface impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), and which is designed to hold an accumulation of liquids or sludges. The term includes holding, storage, settling, and aeration pits, ponds, or lagoons, but does not include injection wells.

(81) "Surface water" means all lakes, rivers, ponds, streams, inland waters, salt waters and all other water and water courses within the jurisdiction of the state of Washington.

(82) "Transfer station" means a permanent, fixed, supplemental collection and transportation facility, used by persons and route collection vehicles to deposit collected solid waste from off-site into a larger transfer vehicle for transport to a solid waste handling facility. Transfer stations may also include recycling facilities.

(83) "Treatment" means the physical, chemical or biological processing of solid waste to make such solid wastes safer for storage or disposal, amenable for energy or material resource recovery or reduced in volume.

(84) "Utilization" means consuming, expending, or exhausting by use, solid waste materials.

(85) "Vadose zone" means that portion of a geologic formation in which soil pores contain some water, the pressure of that water is less than atmospheric pressure, and the formation occurs above the zone of saturation.

(86) "Vector" means a living animal, insect or other arthropod which transmits an infectious disease from one organism to another.

(87) "Waste recycling" means reusing waste materials and extracting valuable materials from a waste stream.

(88) "Waste reduction" means reducing the amount or type of waste generated.

(89) "Water quality standard" means a standard set for maximum allowable contamination in surface waters as set forth in chapter 173-201 WAC, Water quality standards for waters of the state of Washington.

(90) "Wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, estuaries, and similar areas.

(91) "Woodwaste" means solid waste consisting of wood pieces or particles generated as a by-product or waste from the manufacturing of wood products, handling and storage of raw materials and trees and stumps.
This includes but is not limited to sawdust, chips, shavings, bark, pulp, hog fuel, and log sort yard waste, but does not include wood pieces or particles containing chemical preservatives such as creosote, pentachlorophenol, or copper–chrome–arsenate.

92) "Zone of saturation" means that part of a geologic formation in which soil pores are filled with water and the pressure of that water is equal to or greater than atmospheric pressure.

93) "Buy–back recycling center" means any facility which collects, receives, or buys recyclable materials from household, commercial, or industrial sources for the purpose of accumulating, grading, or packaging recyclable materials for subsequent shipment and reuse, other than direct application to land.

94) "Domestic wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim, or dispose of domestic wastewater together with such industrial waste as may be present.

95) "Industrial wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim, or dispose of industrial wastewater.

96) "Liquid" means a substance that flows readily and assumes the form of its container but retains its independent volume.

97) "Reserved" means a section having no requirements and which is set aside for future possible rulemaking as a note to the regulated community.

98) "Limited purpose landfills" means a landfill that receives solid waste of limited types, known and consistent composition, other than woodwastes, garbage, inert waste, and demolition waste.


WAC 173-304-400 Solid waste handling facility standards. (1) Applicability. The standards of WAC 173-304-405 through 173-304-490 are the solid waste handling facility standards and apply to all solid waste handling facilities, except for:

(a) Waste recycling facilities, whose standards are spelled out in WAC 173-304-300;

(b) On–site containerized storage, collection and transportation facilities which are spelled out in WAC 173-304-200;

(c) Single family residences and single family farms whose year round occupants engage in solid waste handling of the single family’s solid waste on–site;

(d) Problem wastes as defined in WAC 173-304-100;

(e) Solid waste handling facilities that have engaged in closure and closed before the effective date of this regulation; and

(f) Domestic wastewater facilities and industrial wastewater facilities otherwise regulated by federal, state, or local water pollution permits except for any portion that utilizes or engages in landspreading disposal sludges or solid residues directly on the land.

(2) Standards for permits. The standards of WAC 173-304-405 through 173-304-490 shall be used as the basis for permitting as required in WAC 173-304-600.

(3) Effective dates.

(a) All existing facilities not in conformance with the following sections of the facility standards shall be placed upon compliance schedules under WAC 173-304-600 (1)(c) to assure full compliance within eighteen months of the effective date of this regulation for:

(i) The general facility standards, WAC 173-304-405;

(ii) The transfer stations, baling and compaction standards, WAC 173-304-410;

(iii) Ground water monitoring required in WAC 173-304-490;

(iv) The landfill operating and maintenance standards, WAC 173-304-460(4);

(v) The tire pile standards of WAC 173-304-420(4); and

(vi) The landspreading disposal standards of WAC 173-304-450(5).

(b) All applicable solid waste facilities shall be in compliance with the general closure and post–closure standards of WAC 173-304-407 and the financial assurance standards of WAC 173-304-467 and 173-304-468 by twelve months after the effective date of WAC 173-304-407, 173-304-467, and 173-304-468 except for owners or operators of existing facilities that have a closure plan approved by the jurisdictional health department in a solid waste permit issued before the effective date of these amendments and are closing before November 27, 1989. Existing solid waste facilities shall be placed upon compliance schedules under WAC 173-304-600 (1)(c) to assure compliance by the effective date of this subsection.

(c) All existing solid waste facilities not in conformance with facility standards other than those in (a) and (b) of this subsection shall be placed upon compliance schedules under WAC 173-304-600 (1)(c) to assure full compliance within four years of the effective date of this regulation.

(d) All new and expanded facilities other than those in (b) of this subsection shall meet the facility standards of WAC 173-304-405 to 173-304-490 after the effective date of this regulation.


WAC 173-304-405 General facility requirements. (1) Applicability. All applicable solid waste handling facilities shall meet the requirements of this section.

(2) Plan of operation. Each owner or operator shall develop, keep and abide by a plan of operation approved as part of the permitting process in WAC 173-304-600. The plan shall describe the facilities' operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health officer. The facility must be operated in accordance with the plan or the plan must be modified with the approval of the jurisdictional health officer.
shall be recorded as part of the deed with the county department. Owners or operators of drop boxes may develop a generic plan of operation applicable to all such drop boxes, owned or operated.

Each plan of operation shall include:
(a) How solid wastes are to be handled on-site during its active life;
(b) How inspections and monitoring are conducted and their frequency;
(c) Actions to take if there is a fire or explosion;
(d) Actions to take if leaks are detected;
(e) Corrective action programs to take if ground water is contaminated;
(f) Actions to take for other releases (e.g. failure of run-off containment system);
(g) How equipment such as leachate collection and gas collection equipment are to be maintained;
(h) A safety plan or procedure; and
(i) Other such details as required by the jurisdictional health department.

(3) Recordkeeping. Each owner or operator shall maintain daily operating records on the weights (or volumes), number of vehicles entering and, if available, the types of wastes received. Major deviations from the plan of operation shall also be noted on the operating record.

(4) Reporting. Each owner or operator shall prepare and submit a copy of an annual report to the jurisdictional health department and the department by March 1 of each year. The annual report shall cover facility activities during the previous year and must include the following information:
(a) Name and address of the facility;
(b) Calendar year covered by the report;
(c) Annual quantity, in tons, or volume, in cubic yards, and estimated in-place density in pounds per cubic yard of solid waste handled, by type of solid waste if available, for each type of treatment, storage, or disposal facility, including applicable recycling facilities; and
(d) Results of ground water monitoring required in WAC 173-304-490.

(5) Inspections. The owner or operator shall inspect the facility to prevent malfunctions and deterioration, operator errors and discharges which may cause or lead to the release of wastes to the environment or a threat to human health. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment. The owner or operator shall keep an inspection log or summary including at least the date and time of inspection, the printed name and the handwritten signature of the inspector, a notation of observations made and the date and nature of any repairs or corrective action. The log or summary must be kept at the facility or other convenient location if permanent office facilities are not on-site, for at least three years from the date of inspection. Inspection records shall be available to the jurisdictional health department upon request.

(6) Recording with county auditor. Maps and a statement of fact concerning the location of the disposal site shall be recorded as part of the deed with the county auditor not later than three months after closure. Records and plans specifying solid waste amounts, location and periods of operation shall be submitted to the local zoning authority or the authority with jurisdiction over land use and be made available for inspection.

(7) State and local requirements. All solid waste disposal facilities shall comply with all state and local requirements such as zoning land use, fire protection, water pollution prevention, air pollution prevention, nuisance and aesthetics.


WAC 173-304-407 General closure and post-closure requirements. (1) Applicability. The requirements of subsections (2), (3), (4), and (5) of this section apply to all solid waste handling facilities. The requirements of subsections (6), (7), and (8) of this section apply to:
(a) Landfills subject to WAC 173-304-460 including limited purpose landfills under WAC 173–304–460(5);
(b) Surface impoundments under WAC 173–304–430 (2)(g) closed with waste remaining in place;
(c) Woodwaste landfills under WAC 173–304–462; and
(d) Landspreading disposal facilities under WAC 173–304–450(2).

(2) Effective dates. Existing facilities subject to the requirements of this section shall meet the applicable facility standards of this section within twelve months of the effective date of this regulation. All new or expanded facilities subject to the requirements of this section shall meet the applicable facility standards on the effective date of this regulation.

(3) Closure performance standard. Each owner or operator shall close their facility in a manner that:
(a) Minimizes the need for further maintenance;
(b) Controls, minimizes, or eliminates threats to human health and the environment from post-closure escape of solid waste constituents, leachate, landfill gases, contaminated rainfall or waste decomposition products to the ground, ground water, surface water, and the atmosphere; and
(c) Prepares the facility for the post-closure period.

(4) Closure plan and amendment(s). Closure as defined in WAC 173–304–100(11), includes but is not limited to grading, seeding, landscaping, contouring, and/or screening. For interim solid waste handling sites, closure includes waste removal and decontamination of the site.

(a) Each owner or operator shall develop, keep and abide by a plan of closure approved by the jurisdictional health department as part of the permitting process in WAC 173–304–600.

(b) The closure plan shall project time intervals at which sequential partial closure is to be implemented, and identify closure cost estimates and projected fund withdrawal intervals for the associated closure costs, from the approved financial assurance instrument.

(c) Each owner or operator shall not commence disposal operations in any part of a facility until a closure
plan for the entire facility has been approved by the jurisdictional health department, and until a financial assurance instrument has been provided, as required by applicable laws and regulations.

(d) The jurisdictional health department shall approve, disapprove, or require amendment of the closure plan as part of the permitting process of WAC 173-304-600 in accordance with applicable laws and regulations.

(e) Each owner and operator shall close the facility in accordance with the approved closure plan and all approved amendments.

(5) Closure procedures.

(a) Each owner and operator shall notify the jurisdictional health department and where applicable, the financial assurance instrument trustee, of the intent to implement the closure plan in part or whole, no later than one hundred eighty days prior to the projected final receipt of waste at the entire facility unless otherwise specified in the closure plan.

(b) The owner or operator shall commence implementation of the closure plan in part or whole within thirty days after receipt of the final volume of waste and/or attaining the final landfill elevation at part of or at the entire facility as identified in the approved facility closure plan unless otherwise specified in the closure plan.

(c) Waste shall not be accepted for disposal or for use in closure except as identified in the closure plan approved by the jurisdictional health department, as required in subsection (3)(a) of this section.

(d) When facility closure is completed in part or whole, each owner and operator shall submit the following to the jurisdictional health department:
   (i) Facility closure plan sheets signed by a professional engineer registered in the state of Washington and modified as necessary to represent as-built changes to final closure construction as approved in the closure plan;
   (ii) Certification by the owner or operator, and a professional engineer registered in the state of Washington that the site has been closed in accordance with the approved closure plan.

(e) The jurisdictional health department shall notify the owner or operator and the department of ecology of the date when the facility post-closure period has begun, which period shall commence when the jurisdictional health department has verified the facility has been closed in accordance with the specifications of the approved closure plan and the closure requirements of this section.

(6) Post-closure performance standard. Each owner or operator shall provide post-closure activities to allow for continued facility maintenance and monitoring of air, land, and water as long as necessary for the facility to stabilize and to protect human health and the environment.

(7) Post-closure plan and amendment. For disposal facilities; post-closure includes ground water monitoring; surface water monitoring; gas monitoring; and maintenance of the facility, facility structures, and monitoring systems for their intended use for a period of twenty years and any other activities deemed appropriate by the jurisdictional health department.

(a) Each owner or operator shall develop, keep and abide by a post-closure plan approved as a part of the permitting process in WAC 173-304-600. The post-closure plan shall address facility maintenance and monitoring activities for at least a twenty-year period or until the site becomes stabilized (i.e., little or no settlement, gas production or leachate generation), and monitoring of ground water, surface water, and gases can be safely discontinued.

(b) The post-closure plan shall project time intervals at which post-closure activities are to be implemented, and identify post-closure cost estimates and projected fund withdrawal intervals from the selected financial assurance instrument, where applicable, for the associated post-closure costs.

(c) Each owner or operator shall not commence disposal operations in any part of a facility until a post-closure plan for the entire facility has been approved by the jurisdictional health department, and until a financial assurance instrument has been provided where applicable, as required by WAC 173-304-467.

(d) Each owner or operator shall complete the post-closure activities in accordance with the approved post-closure plan and schedule. Facility post-closure activities shall be completed in accordance with the approved post-closure plan or the plan shall be so amended with the approval of the jurisdictional health department.

(e) The jurisdictional health department may determine that a facility post-closure plan is invalid and require an owner or operator to amend the facility post-closure plan.

   (i) The health department may direct facility post-closure activities, in part or whole, to cease until the post-closure plan amendment has received written approval by the health department.
   (ii) When the health department determines a facility post-closure amendment is required, the health department shall, after consultation with the owner/operator, designate a compliance schedule for submittal of the amendment and its review and approval by the department.

(8) Post-closure procedures.

(a) Each owner or operator shall commence post-closure activities after completion of closure activities outlined in subsection (5)(d)(i) and (ii) of this section. The jurisdictional health department may direct that post-closure activities cease until the owner or operator receives a notice to proceed with post-closure activities.

(b) When post-closure activities are complete, the owner or operator shall certify to the jurisdictional health department, signed by the owner or operator, and a professional engineer registered in the state of Washington stating why post-closure activities are no longer necessary (i.e., little or no settlement, gas production, or leachate generation).

(c) If the jurisdictional health department finds that post-closure monitoring has established that the facility is stabilized (i.e., little or no settlement, gas production,
or leachate generation), the health department may authorize the owner or operator to discontinue post-closure maintenance and monitoring activities. [Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-407, filed 10/4/88.]

WAC 173-304-430 Surface impoundment standards. (1) Applicability. (a) These standards are applicable to solid wastes that are liquids or sludges containing free liquids as defined in WAC 173-304-100 and applicable under WAC 173-304-015(2) and are stored or treated in surface impoundments; (b) These standards are also applicable to sludges and septage stored or treated in surface impoundments; and (c) These standards are not applicable to: (i) Surface impoundments whose facilities and discharges are otherwise regulated under federal, state, or local water pollution permits; and (ii) Retention or detention basins used to collect and store stormwater runoff. (2) Requirements. All surface impoundments must be designed, constructed, and operated so as to: (a) Meet the performance standards of WAC 173-304-460(2); (b) Have an inplace or imported soil liner of at least two feet of 1 x 10^-7 cm/sec permeability or an equivalent combination of any thickness greater than two feet and a greater permeability to protect the underlying aquifers or a thirty mil reinforced artificial liner placed on top of a structurally stable foundation to support the liners and solid waste and to prevent settlement that would destroy the liner; natural soils shall be recompacted to achieve an equivalent permeability. Owners or operators shall be allowed to use alternative designs, operating practices and locational characteristics which prevent migration of solid waste constituents or leachate into the ground or surface waters at least as effectively as the liners described in this subsection; (c) Avoid washout including the use of an extended liner or dikes or restriction of flow in the one hundred year floodplain and to comply with local floodplain management ordinances and chapter 508-60 WAC, Administration of flood control zones; (d) Have dikes designed with slopes so as to maintain the structural integrity under conditions of a leaking liner and capable of withstanding erosion from wave action; (e) Have the freeboard equal to or greater than eighteen inches to avoid overtopping from wave action, overfilling, or precipitation; (f) Have either a ground water monitoring system, or a leachate detection, collection and treatment system, for surface impoundments having a capacity of more than two million gallons unless the jurisdictional health department and the department require either for smaller surface impoundments. For purposes of this subsection, capacity refers to the total capacity of all surface impoundments on-site (i.e., two, one million gallon surface impoundments on one site will trigger these monitoring requirements); (g) Be closed in a manner which removes all solid wastes including liners, etc. to another permitted facility and the site returned to its original or acceptable topography except that surface impoundments closed with the waste remaining in place shall meet the requirements of WAC 173-304-407 and 173-304-130; (h) A jurisdictional health department may require that the liner be inspected for wear and integrity and repaired or replaced by removing stored solid wastes or otherwise inspecting the liner or base at any time. The request shall be in writing and cite the reasons including valid ground water monitoring or leachate detection data leading to such an inspection and repair; (i) Surface impoundments containing septage will also be subject to the department’s "criteria for sewage works design" used to review plans for septage surface impoundments; and (j) Surface impoundments that have the potential to impound more than ten acre-feet of waste measured from the top of the dike and which would be released by a failure of the containment dike shall be reviewed and approved by the dam safety section of the department. [Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-430, filed 10/4/88. Statutory Authority: Chapter 43.21A RCW. 85-22-013 (Order 85-18), § 173—304—430, filed 10/28/85.]

WAC 173-304-450 Landspreading disposal standards. (1) Applicability. These standards apply to facilities that engage in landspreading disposal of solid wastes. These standards do not apply to: (a) Facilities utilizing sludge, woodwaste or other primarily organic sludges according to the Municipal and Domestic Sludge Utilization Guidelines WDOE 82-11, specified in WAC 173-304-300 (4) and (5); (b) Agricultural solid wastes resulting from the operation of a farm including farm animal manure and agricultural residues; and (c) Inert wastes and demolition wastes. (2) Owners or operators of landspreading disposal facilities shall meet the minimum functional standards for performance of WAC 173-304-460(2) and the general facilities standards of WAC 173-304-405. (3) Owners or operators of landspreading disposal facilities shall meet the locational standards of WAC 173-304-130. (4) Minimum functional standard for design. Owners or operators of landspreading disposal facilities shall design landspreading facilities so as to: (a) Provide interim waste storage facilities that meet the requirements of WAC 173-304-400 standards (i.e., for piles, surface impoundments, etc.); (b) Collect and treat all run-off from a twenty-four hour, twenty-five year storm, and divert all run-on for the maximum flow of a maximum twenty-five year storm around the active area; (c) Avoid standing water anywhere on the active area; (d) Avoid slopes and other features that will lead to soil and waste erosion, unless contour plowing or other measures are taken to avoid erosion; (e) Monitor ground water according to WAC 173-304-490; and
(f) Control access to site by fencing or other means and erect signs.

(5) Minimum functional standards for maintenance and operation. Owners or operators of landspreading disposal facilities shall maintain and operate the facilities so as to:
(a) Avoid any landspreading disposal of garbage or medical waste;
(b) Analyze solid wastes according to the requirements spelled out in the Municipal and Domestic Sludge Utilization Guidelines WDOE 82–11;
(c) Avoid applying wastes at rates greater than ten times agronomic rates using the proposed cover crop, or depths greater than would allow for discing the soil by tracked vehicles;
(d) Provide discing of soils during the growing season and after each application of waste to maintain aerobic soil conditions, minimize odors and lessen run-off;
(e) Avoid applying waste to any active area having standing water;
(f) Conform to the operating plan and the requirements of WAC 173–304–405;
(g) Avoid food chain crops during the active life of the facility and until demonstrated to be safe, after closure, according to the closure and post-closure plans filed with the plan of operation. Specific approval in writing from the jurisdictional health department is required for any landspreading disposal facility that is used to raise food crops after closure. Any new owner or operator of a closed landspreading disposal facility shall notify the jurisdictional health department within sixty days of the purchase; and
(h) Provide for a written contract between landowners, waste generators, waste haulers and waste operators requiring compliance with rules as a condition of the contract.

(a) All owners or operators of landspreading disposal facilities shall close in such a manner as to comply with WAC 173–304–407;
(b) Financial assurance. All owners or operators of landspreading disposal facilities shall have a written estimate, in current dollars, of the cost of closing the facility. The closure cost estimate must equal the cost of closure at the point in the operating life of the facility when the extent and manner of operation would make closure the most expensive, as indicated by the closure plan.

In addition, all facilities shall have a written post-closure estimate, in current dollars, the cost of post-closure monitoring and maintenance during the post-closure period.

WAC 173–304–460 Landfilling standards. (1) Applicability. These standards apply to facilities that dispose of solid waste in landfills except for:
(a) Inert wastes and demolition wastes landfills, that must meet WAC 173–304–461 standards; and
(b) Woodwaste landfills that must meet WAC 173–304–462 standards.

(a) Ground water. An owner or operator of a landfill shall not contaminate the ground water underlying the landfill, beyond the point of compliance. Contamination and point of compliance are defined in WAC 173–304–100.
(b) Air quality and toxic air emissions.
(i) An owner or operator of a landfill shall not allow explosive gases generated by the facility whose concentration exceeds:
(A) Twenty-five percent of the lower explosive limit for the gases in facility structures (excluding gas control or recovery system components);
(B) The lower explosive limit for the gases at the property boundary or beyond; and
(C) One hundred parts per million by volume of hydrocarbons (expressed as methane) in off-site structures.
(ii) An owner or operator of a landfill shall not cause a violation of any ambient air quality standard at the property boundary or emission standard from any emission of landfill gases, combustion or any other emission associated with a landfill.
(c) Surface waters. An owner or operator of a landfill shall not cause a violation of any receiving water quality standard or violate chapter 90.48 RCW from discharges of surface run-off, leachate or any other liquid associated with a landfill.

(3) Minimum functional standards for design.
(a) Minimizing liquids. All owners or operators of landfills shall minimize liquids admitted to active areas of landfills by:
(i) Covering according to WAC 173–304–460 (4)(d);
(ii) Prohibiting the disposal of noncontainerized liquids or sludges containing free liquids in landfills unless approved by the jurisdictional health department;
(iii) Designing the landfill to prevent all the run-on of surface waters and other liquids resulting from a maximum flow of a twenty-five year storm into the active area of the landfill;
(iv) Designing the landfill to collect the run-off of surface waters and other liquids resulting from a twenty-four hour, twenty-five year storm from the active area and the closed portions of a landfill;
(b) Leachate systems. All owners or operators of landfills shall:
(i) Install a leachate collection system sized according to water balance calculations or using other accepted engineering methods either of which shall be approved by the jurisdictional health department;
(ii) Install a leachate collection system so as to prevent no more than two feet of leachate developing at the topographical low point of the active area; and
(iii) Install a leachate treatment, or a pretreatment system if necessary in the case of discharge to a municipal waste water treatment plant, to meet the requirements for permitted discharge under chapter 90.48 RCW and the Federal Clean Water Act (PL 95–217).
(c) Liner designs. All owners or operators of landfills shall use liners of one of the following designs:
(i) Standard design. The liner shall be constructed of at least a four feet thick layer of recompacted clay or other material with a permeability of no more than $1 \times 10^{-7}$ cm/sec and sloped no less than two percent; or

(ii) Alternative design. The design shall have two liners:

   (A) An upper liner of at least fifty mils thickness made of synthetic material; and

   (B) A lower liner of at least two feet thickness of recompacted clay or other material with a permeability of no more than $1 \times 10^{-4}$ cm/sec and sloped no less than two percent; or

(iii) Equivalent design. The design shall use alternative methods, operating practices and locational characteristics which will minimize the migration of solid waste constituents or leachate into the ground or surface water at least as effectively as the liners of (c)(i) and (ii) of this subsection; or

(iv) Arid design. This design will apply to locations having less than twelve inches of precipitation annually, and, in lieu of (c)(i), (ii), and (iii) of this subsection, shall consist of vadose zone moisture monitoring, provided that:

   (A) Waste material is no less than ten feet above the seasonal high level of ground water in the uppermost aquifer; and

   (B) Any evidence of leachate or waste constituents detected in the vadose zone that violates or could be expected to violate the performance standard of WAC 173-304-460(2) shall cause the owner or operator to:

      (I) Take corrective action, and either

      (II) Close the facility according to these rules, or

      (III) For all future expansions at that facility, meet the liner requirement of (c)(i) or (ii) of this subsection.

(v) Small landfill designs. For a landfill whose design and permit allow a total capacity at closure of two hundred thousand cubic yards or less, the need for a liner and leachate collection system shall be determined on a case-by-case basis by the jurisdictional health department in consultation with the department.

(d) Floodplains. All owners or operators of landfills that are located in a one hundred year floodplain shall:

(i) Comply with local floodplain management ordinances and chapter 508-60 WAC, Administration of flood control zones; and

(ii) Design the landfill so that the landfill entrance or exit roads or practices shall not restrict the flow of the base flood, reduce the temporary water storage capacity of the floodplain or result in washout of solid waste, so as to pose a hazard to human life, wildlife, land or water resources.

(e) Closure. All owners and operators shall design landfills so that at closure:

(i) At least two feet of $1 \times 10^{-6}$ cm/sec or lower permeability soil or equivalent shall be placed upon the final lifts unless the landfill is located in an area having mean annual precipitation of less than twelve inches in which case at least two feet of $1 \times 10^{-3}$ cm/sec or lower permeability soil or equivalent shall be placed upon the final lifts. Artificial liners may replace soil covers provided that a minimum of fifty mils thickness is used;

(ii) The grade of surface slopes shall not be less than two percent, nor the grade of side slopes more than thirty-three percent; and

(iii) Final cover of at least six inches of topsoil be placed over the soil cover and seeded with grass, other shallow rooted vegetation or other native vegetation.

(f) Gas control.

(i) All owners and operators shall design landfills, having a permitted capacity of greater than ten thousand cubic yards per year, so that methane and other gases are continuously collected, and

   (A) Purified for sale;

   (B) Flared; or

   (C) Utilized for its energy value.

(ii) Collection and handling of landfill gases shall not be required if it can be shown that little or no landfill gases will be produced or that landfill gases will not support combustion; in such cases installation of vents shall be required.

(g) Other requirements. All owners and operators of landfills shall design landfills to:

(i) Be fenced at the property boundary or use other means to impede entry by the public and animals. A lockable gate shall be required at the entry to the landfill;

(ii) Monitor ground water according to WAC 173-304-490 using a design approved by the local jurisdictional health department with the guidance of the department. The jurisdictional health department may also require monitoring of:

      (A) Surface waters, including run-off;

      (B) Leachate;

      (C) Subsurface landfill gas movement and ambient air; and

      (D) Noise.

(iii) Weigh all incoming waste on scales for landfills having a permitted capacity of greater than ten thousand cubic yards per year or provide an equivalent method of measuring waste tonnage capable of estimating total annual solid waste tonnage to within plus or minus five percent;

(iv) Provide for employee facilities including shelter, toilets, hand washing facilities and potable drinking water for landfills having the equivalent of three or more full-time employees;

(v) Erect a sign at the site entrance that identifies at least the name of site, if applicable, the hours during which the site is open for public use, unacceptable materials and an emergency telephone number. Other pertinent information may be required by the jurisdictional health department;

(vi) Provide on-site fire protection as determined by the local and state fire control jurisdiction;

(vii) Prevent potential rat and other vectors (such as insects, birds, and burrowing animals) harborage in buildings, facilities, and active areas;

(viii) Provide the unloading area(s) to be as small as possible, consistent with good traffic patterns and safe operation;

[1988 WAC Supp—page 539]
(ix) Provide approach and exit roads to be of all-weather construction, with traffic separation and traffic control on-site, and at the site entrance; and

(x) Provide communication between employees working at the landfill and management offices on-site and off-site (such as telephones) to handle emergencies.

(4) Minimum functional standards for maintenance and operation.

(a) Operating plans. All owners or operators of landfills shall maintain and operate the facility so as to conform to the approved plan of operation.

(b) Operating details. All owners or operators of landfills shall operate the facility so as to:

(1) Control road dust;

(2) Perform no open burning unless permitted by the jurisdictional air pollution control agency or the department under the Washington Clean Air Act, chapter 70-94 RCW. Garbage shall not be open burned.

(3) Collect scattered litter as necessary to avoid a fire hazard or an aesthetic nuisance;

(4) Prohibit scavenging;

(v) Conduct on-site reclamation in an orderly sanitary manner, and in a way that does not interfere with the disposal site operation;

(vi) Insure that at least two landfill personnel are on-site with one person at the active face when the site is open to the public for landfills with a permitted capacity of greater than fifty thousand cubic yards per year;

(vii) Control insects, rodents and other vectors; and

(viii) Insure that reserve operational equipment shall be available to maintain and meet these standards.

(c) Boundary posts. All owners or operators of landfills shall clearly mark the active area boundaries authorized in the permit, with permanent posts or using equivalent method clearly visible for inspection purposes.

(d) Compaction and daily cover. All owners or operators of landfills shall:

(i) Thoroughly compact the solid waste before succeeding layers are added; and

(ii) Cover compacted waste containing garbage fully with at least six inches of compacted cover material after each day of operation. The jurisdictional health department may allow less frequent covering by considering:

(A) The characteristics of the solid waste;

(B) The climatic and geologic setting;

(C) The size of the facility; and

(D) The potential for nuisance conditions.

(e) Monitoring systems. All owners and operators of landfills shall maintain the monitoring system required in subsection (3)(g)(ii) of this section.

(f) Recycling required.

(i) All owners or operators of landfills at which the general public delivers household solid waste shall provide the opportunity for the general public to recycle cans, bottles, paper and other material for which a market exists and brought to the landfill site:

(A) During the normal hours of operation;

(B) In facilities convenient to the public (i.e., near entrance to the gate).

(ii) Owners or operators may demonstrate alternative means to providing an opportunity to the general public to recycle household solid waste.

(g) Disposal of dangerous waste prohibited. Owners or operators of landfills shall not knowingly dispose, treat, store, or otherwise handle dangerous waste unless the requirements of the dangerous waste regulation, chapter 173-303 WAC are met.

(5) Limited purpose landfill standards.

(a) Limited purpose landfills shall meet the following requirements:

(i) The general facility standards of WAC 173-304-405;

(ii) The general closure and post-closure standards of WAC 173-304-407;

(iii) The performance standards of WAC 173-304-460(2);

(iv) The financial assurance standards of WAC 173-304-467 and 173-304-468; and


(b) In addition, limited purpose landfills must meet all other standards of WAC 173-304-130 and 173-304-460 unless the owner or operator applies for relief from each of these requirements as part of their permit application and includes evidence or reasons why the nature of the waste, the disposal site and other factors can protect the environment and the public health.


(a) These standards apply to all new and expanded landfill disposal facilities, and to existing landfill disposal facilities that have not been closed on or before November 27, 1989. Landfill disposal facilities include:

(i) All solid waste facilities operated as landfills under WAC 173-304-460, including limited purpose landfills under WAC 173-304-460(5);

(ii) Facilities operated as surface impoundments under WAC 173-304-430 that are closed with the waste remaining in place and therefore required to meet the requirements of WAC 173-304-407; and

(iii) Woodwaste landfills operated under WAC 173-304-462;

(b) For the purposes of this section, landfill disposal facilities are divided into the following ownership/use categories:

(i) A privately-owned facility that accepts waste from the general public;

(ii) A publicly-owed facility that accepts waste from the general public.

(c) For the purposes of this section, publicly-owned or operated facilities may set up one account for both closure and post-closure care of each facility.

(2) Cost estimate for closure.

(a) Each owner or operator shall prepare a written closure cost estimate as part of the facility closure plan. The closure cost estimate shall be in current dollars and
represent the cost of closing the facility in accordance with the closure requirements in WAC 173–304–407.

(i) The cost estimate shall be based on a reasonable cost estimate for completing design, purchase, construction, and other activities as identified in the facility closure plan as required under WAC 173–304–407;

(ii) The closure plan shall project intervals for withdrawal of closure funds from the closure financial assurance instrument to complete the activities identified in the approved closure plan;

(iii) The closure cost estimate shall not be reduced by allowance for salvage value of equipment, waste, or the resale value of property or land;

(b) Each owner or operator shall prepare a new closure cost estimate in accordance with (a) and (c) of this subsection whenever:

(i) Changes in operating plans or facility design affect the closure plan;

(ii) There is a change in the expected year of closure that affects the closure plan; or

(iii) The jurisdictional health department directs the owner or operator to revise the closure plan or closure cost estimate.

(c) Each owner or operator shall review the closure cost estimate annually thirty days prior to the anniversary date of the first closure cost estimate. The review will examine all factors, including inflation, involved in estimating the closure cost. Any cost changes must be factored into a revised closure cost estimate and submit the revised cost estimate to the jurisdictional health department for review and approval.

(d) During the operating life of the facility, the owner or operator shall make the latest closure cost estimate in accordance with (a) and (b) of this subsection, and when this estimate has been adjusted in accordance with (c) of this subsection, made available for review.

(3) Financial assurance account for closure. Each owner or operator of an applicable landfill disposal facility shall establish a financial assurance account in an amount that, over the life of the facility, will accumulate funds to be equal to the closure cost estimate prepared in accordance with (a) and (b) of this subsection whenever:

(a) Landfill disposal facilities that accept waste from the general public shall choose from the following options or combination of options for accounting for the financial assurance account:

(i) For landfill disposal facilities owned or operated by municipal corporations, the closure and post-closure reserve account shall be handled in one of the following ways:

(A) Cash and investments accumulated and restricted for closure with an equivalent amount of fund balance reserved in the fund accounting for solid waste activity; or

(B) The cash and investments held in a nonexpendable trust fund.

(C) Other approved method.

(ii) Closure trust fund established with an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency. The wording of the trust agreement must be acceptable to the local health department. The purpose of the closure trust fund is to receive and manage any funds paid by the owner or operator and to disburse those funds only for closure activities as identified in the approved closure plan.

(b) For private disposal facilities that accept public waste, established closure financial assurance accounts shall not constitute an asset of the facility owner or operator.

(c) During the operating life of the facility, the owner or operator must review the closure cost estimate thirty days before each anniversary of the date on which the first closure cost estimate was prepared. The review shall examine all factors, including inflation, involved in estimating the closure cost estimate. Any changes in costs shall be factored into a revised closure cost estimate. The new estimate shall be submitted to the jurisdictional health department for review and approval.

(d) For disposal facilities of this section, any income in excess of the closure cost estimate accruing to the established closure financial assurance account will be at the owner’s discretion as to the use of said funds.

(e) Excess moneys remaining in the closure financial assurance account after the completion of all identified closure activities will be released to the facility owner or operator.

(4) Cost estimate for post-closure.

(a) Each owner or operator shall prepare a written post-closure cost estimate as part of the facility post-closure plan. The post-closure cost estimate shall be in current dollars and represent the total cost of completing post-closure activities for the facility for at least a twenty-year post-closure period in accordance with the post-closure requirements in WAC 173–304–407.

(i) The post-closure cost estimate shall be based on a reasonable cost estimate for completing post-closure monitoring, maintenance, and other activities identified in the approved facility post-closure plan as required under WAC 173–304–407;

(ii) The post-closure plan shall project annual or other intervals for withdrawal of post-closure funds from the post-closure financial assurance instrument to complete the activities identified in the approved post-closure plan;

(iii) The post-closure cost estimate shall not be reduced by allowance for salvage, value of equipment, waste, or resale value of property or land.

(b) Each owner or operator shall prepare a new post-closure cost estimate for the remainder of the post-closure care twenty-year period in accordance with (a) and (c) of this subsection, whenever:

(i) Change in the post-closure plan increases or decreases the cost of post-closure care; or

(ii) The jurisdictional health department directs the owner or operator to revise the post-closure plan or post-closure cost estimate.

(c) During the operating life of the facility, the owner or operator shall review the post-closure cost estimate thirty days prior to each anniversary of the date on
which the first post-closure cost estimate was prepared. The review shall examine all factors, including inflation, involved in estimating the post-closure cost estimate. Any changes in costs must be factored into a revised post-closure cost estimate. The new estimate must be submitted to the jurisdictional health department for approval.

(d) During the operating life of the facility, the owner or operator shall keep the latest post-closure cost estimate prepared in accordance with (a) and (b) of this subsection, available for review.

(5) Financial assurance account for post-closure. Each owner or operator of a landfill disposal facility shall establish a financial assurance account in an amount equal to the post-closure cost estimate prepared in accordance with subsection (4) of this section.

(a) Applicable landfill disposal facilities that accept waste from the general public shall choose from the following options or combinations of options for accounting for the financial assurance account:

(i) For landfill disposal facilities owned or operated by municipal corporations, the post-closure reserve shall be handled in one of the following ways:

(A) Cash and investments accumulated and restricted for post-closure with an equivalent amount of fund balance reserved in the fund accounting for solid waste activity;

(B) Cash and investments held in a nonexpendable trust fund.

(C) Other approved method.

(ii) Post-closure trust fund established with an entity which has the authority to act as a trustee and whose trust operations are regulated by a federal or state agency. The wording of the trust agreement must be acceptable to the department of ecology. The purpose of the post-closure trust fund is to receive and manage any funds paid by the owner or operator and to disburse those funds only for post-closure activities as identified in the approved post-closure plan.

(b) Each facility owner or operator must establish a procedure with the financial assurance instruments trustee for notification of nonpayment of funds to be sent to the jurisdictional health department and the department of ecology.

(c) Each owner or operator shall file with the department of ecology an annual audit of the financial assurance accounts established for closure and post-closure activities, and a statement of the percentage of user fees, as applicable, diverted to the financial assurance instruments.

(i) For landfill disposal facilities owned and operated by municipal corporations, the closure reserve account shall be audited according to the audit schedule of the office of state auditor and shall be filed with the department of ecology, including each of the post-closure care years.

(ii) For landfill disposal facilities not owned or operated by municipal corporations:

(A) Annual audits shall be conducted by a certified public accountant licensed in the state of Washington, and shall be filed with the department of ecology no later than March 31 of each year for the previous calendar year, including each of the post-closure care years.

(B) The audit shall also include calculations demonstrating the proportion of closure completed during the preceding year as specified in the closure and post-closure plans.

(d) Existing landfill disposal facilities may submit a written request with their annual audit to the department of ecology requesting a waiver from utilizing user fees to generate the moneys necessary for the closure and/or post-closure financial assurance account.

(i) The waiver request should provide documentation to demonstrate the facility user fees are prohibitively high, and include alternate method(s) for funding the facility’s closure and/or post-closure financial assurance account;

(ii) The waiver request review procedure will be according to WAC 173-304-700.

(7) Authorization for financial assurance account fund withdrawal for closure and post-closure activities.

(a) Each owner or operator will withdraw funds from the closure and/or post-closure financial assurance instrument as specified in the approved closure/post-closure plans;

(b) If the withdrawal of funds from the financial assurance instrument exceeds by more than five percent the withdrawal schedule stated in the approved closure and/or post-closure plan, the closure and/or post-closure plan shall be amended.

[Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-467, filed 10/4/88.]


(a) For the purposes of this regulation private landfill disposal facilities are privately-owned facilities that do not accept waste from the general public and dispose of only their own generated waste.
(b) These standards apply to all new and expanded landfill disposal facilities, and to existing landfill disposal facilities that have not been closed on or before November 27, 1989. Landfill disposal facilities include:

(i) Facilities operated as surface impoundments under WAC 173-304-430 that are closed with waste remaining in place and therefore required to meet the requirements of WAC 173-304-407; and

(ii) Woodwaste landfills operated under WAC 173-304-462.

(2) Cost estimates for closure and post-closure.

(a) Each owner or operator shall prepare separate written closure and post-closure cost estimates as part of the facility closure and post-closure plans. The cost estimates shall be in current dollars and represent the cost of closing or post-closure care of the facility for a period of twenty years in accordance with the closure requirements in WAC 173-304-407.

(i) The cost estimate shall be based on a reasonable cost estimate for completing design, purchase, construction, and other activities as identified in the facility closure or post-closure plan as required under WAC 173-304-407;

(ii) The closure and post-closure plans shall project intervals for withdrawal of funds from the closure or post-closure financial assurance instrument to complete the activities identified in the approved closure or post-closure plan;

(iii) The closure and post-closure cost estimate shall not be reduced by allowance for salvage value of equipment, waste, or the resale value of property or land.

(b) Each owner or operator shall prepare a new closure or post-closure cost estimate in accordance with (a) and (c) of this subsection whenever:

(i) Changes in operating plans or facility design affect the closure or post-closure plans;

(ii) There is a change in the expected year of closure that affects the closure plan; or

(iii) The jurisdictional health department directs the owner or operator to revise the closure or post-closure plan or closure or post-closure cost estimate.

(c) Each owner or operator shall review the closure and post-closure cost estimate thirty days prior to the anniversary date of the date on which the first closure and post-closure cost estimate was prepared. The review shall examine all factors, including inflation, involved in estimating the closure and post-closure cost. Any cost changes shall be factored into a revised closure or post-closure cost estimate and submit the revised cost estimate to the jurisdictional health department and the department of ecology.

(d) During the operating life of the facility, the owner or operator must keep the latest closure and post-closure cost estimate prepared in accordance with (a) and (b) of this subsection, and when this estimate has been adjusted in accordance with (c) of this subsection, available for review.

(e) The department of ecology will evaluate each cost estimate for completeness, and may accept, or require a revision of the cost estimate in accordance with its evaluation.

(f) The surety bond guaranteeing payment into a closure and post-closure trust fund as required under WAC 173-304-407;

(ii) Surety bond guaranteeing payment into a closure and post-closure trust fund as required under WAC 173-304-407;

(iii) The jurisdictional health department directs the owner or operator to revise the closure or post-closure plan;

(iv) There is a change in the expected year of closure that affects the closure plan; or

(v) The jurisdictional health department directs the owner or operator to revise the closure or post-closure plan.

(3) Financial assurance mechanism for closure and post-closure. Each owner or operator of an applicable landfill disposal facility shall establish financial assurance mechanisms in an amount equal to the closure cost estimate and post-closure cost estimate prepared in accordance with subsection (2) of this section.

(a) Applicable landfill disposal facilities shall provide one or more of the following financial assurance instruments:

(i) Closure and post-closure trust funds established with an entity which has authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency. The wording of the trust agreement must be acceptable to the department of ecology. The purpose of the closure and post-closure trust funds is to receive and manage any funds paid by the owner or operator and to disburse those funds only for closure or post-closure activities as identified in the approved closure and post-closure plan;

(ii) Surety bond guaranteeing payment into a closure and post-closure trust fund issued by a surety company listed as acceptable in Circular 570 of the United States Treasury Department or as hereafter amended. The wording of the surety bond(s) must be acceptable to the department. A standby closure and post-closure trust fund must also be established by the permittee. The purpose of the standby closure or post-closure trust fund is to receive any funds that may be paid by the operator or surety company. The bond must guarantee that the permittee will either fund the standby closure or post-closure trust fund in an amount equal to the penal sum of the bond before the site stops receiving waste. The surety shall become liable on the bond obligation if the permittee fails to perform as guaranteed by the bond. The surety may not cancel the bond until at least one hundred twenty days after the notice of cancellation has been received by both the permittee and the local health department. If the permittee has not provided alternate financial assurance acceptable under this section within ninety days of the cancellation notice, the surety must pay the amount of the bond into the standby closure or post-closure trust account;

(iii) Surety bond guaranteeing performance of closure or post-closure issued by a surety company listed as acceptable in Circular 570 of the United States Treasury Department or as hereafter amended. The wording of the surety bond must be acceptable to the department of ecology. A standby closure and post-closure trust fund must also be established by the permittee. The purpose of the standby closure or post-closure trust fund is to receive any funds that may be paid by the surety company. The bond must guarantee that the permittee will perform final closure or post-closure activities. The surety shall become liable on the bond obligation if the permittee fails to perform as guaranteed by the bond. The surety may not cancel the bond until at least one hundred twenty days after the notice of cancellation has been received by the permittee and the local health department. If the permittee has not provided alternative financial assurance acceptable under this section within ninety days of the cancellation notice, the surety must
(iv) Closure or post–closure irrevocable letter of credit issued by an entity which has the authority to issue letters of credit and whose letter–of–credit operations are regulated and examined by a federal or state agency. The wording of the letter of credit must be acceptable to the department. Standby closure and post–closure trust funds must also be established by the permittee. The purpose of the standby trust funds is to receive any funds deposited by the issuing institution resulting from a draw on the letter of credit. The letter of credit must be irrevocable and issued for a period of at least one year unless the issuing institution notifies both the permittee and the local health department at least one hundred twenty days before the current expiration date. If the permittee fails to perform closure and post–closure activities according to the closure or post–closure plan and permit requirements, or if the permittee fails to provide alternate financial assurance acceptable to the department within ninety days after notification that the letter of credit will not be extended, the local health department may draw from the letter of credit;

(v) Closure and post–closure insurance policies issued by an insurer who is licensed to transact the business of insurance or is eligible as an excess or surplus lines insurer in one or more states. The wording of the certificate of insurance must be acceptable to the department. Each insurance policy must guarantee that the funds will be available to complete those activities identified in the approved closure and post–closure plans. The policy must also guarantee that the insurer will be responsible for paying out funds for activities identified in either the closure or post–closure plan. The policy must provide that the insurance is automatically renewable and that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. If there is a failure to pay the premium, the insurer may not terminate the policy until at least one hundred twenty days after the notice of cancellation has been received by both the permittee and the local health department. Termination of the policy may not occur and the policy must remain in full force and effect if: The local health department determines the facility has been abandoned; or closure has been ordered by the local health department or a court of competent jurisdiction, or the permittee has been named as debtor in a voluntary or involuntary proceeding under Title 11 U.S.C. (Bankruptcy); or the premium due is paid. The permittee is required to maintain the policy in full force and until an alternative financial assurance guarantee is provided or when the permit is terminated.

(vi) Financial test and corporate guarantee for closure and post–closure. A private corporation meeting the financial test may provide a corporate guarantee that closure and post–closure activities will be completed according to the approved closure and post–closure plans and permit requirements. To qualify, a private corporation must meet the criteria of either (a)(vi)(A) or (B) of this subsection:

(A) Financial test. To pass the financial test the permit must have:

(I) Two of the following three ratios: A ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; or a ratio of current assets to current liabilities greater than 1.5;

(II) Net working capital and tangible net worth each at least six times the sum of the current closure and post–closure cost estimates;

(III) Tangible net worth of at least ten million dollars; and

(IV) Assets in the United States amounting to at least ninety percent of its total assets or at least six times the sum of the current closure and post–closure cost estimates.

(B) Alternative financial test. To pass the alternative financial test, the permittee must have:

(I) A current rating of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Bbb as issued by Moody's;

(II) Tangible net worth at least six times the sum of the current closure and post–closure cost estimates;

(III) Tangible net worth of at least ten million dollars; and

(IV) Assets in the United States amounting to at least ninety percent of its total assets or at least six times the sum of the current closure and post–closure cost estimates.

(C) The permittee shall demonstrate that it passes the financial test at the time the closure plan is filed and reconfirm that annually ninety days after the end of the corporation's fiscal year by submitting the following items to the department of ecology:

(I) A letter signed by the permittee's chief financial officer that provides the information necessary to document that the permittee passes the financial test; that guarantees that the funds to finance closure and post–closure activities according to the closure or post–closure plan and permit requirements are available; that guarantees that the closure and post–closure will be completed according to the closure or post–closure plan and permit requirements; that guarantees that within thirty days after written notification from the jurisdictional health department that the permittee no longer meets the criteria of the financial test the permittee no longer meets the criteria of the financial test but shall provide an alternative form of financial assurance consistent with the requirements of this section; that guarantees that the permittee will notify the jurisdictional health department within fifteen days any time that the permittee no longer meets the criteria of the financial test or is named as debtor in a voluntary or involuntary proceeding under Title 11 U.S.C. (Bankruptcy); and that acknowledges that the corporate guarantee is a binding obligation on the corporation and that the chief financial officer has the authority to bind the corporation to the guarantee;

(II) A copy of the independent certified public accountant's report on examination of the permittee's financial statements for the latest completed fiscal year;
(III) A special report from the permittee's independent certified public accountant (CPA) stating that the CPA has compared the data which the letter from the permittee's chief financial officer specifies as having been derived from the independently audited year end financial statements for the latest fiscal year with the amounts in such financial statement and that no matters came to the CPA's attention which caused the CPA to believe that the specified data should be adjusted;

(IV) The jurisdictional health department may, based on a reasonable belief that the permittee no longer meets the criteria of the financial test, require reports of the financial condition at any time from the permittee in addition to the annual report. If the jurisdictional health department finds, on the basis of such reports or other information that the permittee no longer meets the criteria of the financial test, the permittee shall provide an alternative form of financial assurance consistent with the requirements of this section, within thirty days after notification by the jurisdictional health department.

(b) For applicable disposal facilities of this section, any income in excess of the cost estimate(s) accruing to the established closure or post-closure financial assurance account will be at the owner's discretion as to the use of said surplus funds.

(c) A permittee may meet the requirements of this section by obtaining a written guarantee from the parent corporation of the permittee. The guarantor must meet one of the financial tests described in (a)(vi)(A) or (B) of this subsection, and must provide the documentation required by (a)(vi)(C) of this subsection. The terms of the guarantee must provide that:

(i) If the permittee fails to perform final closure and, where required, provide post-closure care of a facility covered by the guarantee in accordance with the approved closure and post-closure plans, the guarantor will do so or establish a trust fund as specified in (a)(i) of this subsection in the name of the permittee.

(ii) The guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the permittee, to the jurisdictional health department and to the department of ecology. Cancellation may not occur, however, during the one hundred twenty days beginning on the date of receipt of the notice of cancellation by both the permittee and the department of ecology, as evidenced by the return receipts.

(iii) If the permittee fails to provide alternate financial assurance as specified in this section and obtain the written approval of such alternate assurance from the jurisdictional health department or the department of ecology within ninety days after receipt by both the permittee, the jurisdictional health department, and the department of ecology of a notice of cancellation of the guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the permittee.

(4) Closure/post-closure trust fund account establishment and reporting.

(a) Each owner or operator shall file with the local health department an annual audit of the financial assurance accounts established for closure and post-closure activities.

(b) Annual audits shall be conducted by a certified public accountant licensed in the state of Washington, and shall be filed with the department of ecology no later than March 31 of each year for the previous calendar year, including each of the post-closure care years.

(c) The audit shall also include calculations demonstrating the proportion of closure completed during the preceding year as specified in the closure and post-closure plans.

(5) Authorization for financial assurance account fund withdrawal for closure and post-closure activities.

(a) Each owner or operator shall withdraw funds from the closure and/or post-closure financial assurance instrument as specified in the approved closure/post-closure plans;

(b) If the withdrawal of funds from the financial assurance instrument exceeds by more than five percent the withdrawal schedule in the approved plan, the closure and/or post-closure plan shall be amended.

[Statutory Authority: RCW 70.95.215. 88-20-066 (Order 88-28), § 173-304-468, filed 10/4/88.]

WAC 173-304-600 Permit requirements for solid waste facilities. (1) Applicability.

(a) All facilities which are subject to the standards of WAC 173-304-130, 173-304-300, and 173-304-400 are required to obtain permits. Permits are not required for single family residences and single family farms dumping or depositing solid waste resulting from their own activities on to or under the surface of land owned or leased by them when such action does not create a nuisance, violate statutes, ordinances, or regulations, including this regulation.

(b) Permits are not required for corrective actions at solid waste handling facilities performed by the state and/or in conjunction with the United States Environmental Protection Agency to implement the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA), or corrective actions taken by others to comply with a state and/or federal clean-up order provided that:

(i) The action results in an overall improvement of the environmental impact of the site;

(ii) The action does not require or result in additional waste being delivered to the site or increase the amount of waste or contamination present at the site;

(iii) The facility standards of WAC 173-304-400 are met; and

(iv) The jurisdictional health department is informed of the actions to be taken and is given the opportunity to review and comment upon the proposed corrective action plans.

(c) Effective dates. The effective dates are as follows:

(i) The permit requirements of this section apply to all existing waste handling facilities eighteen months after the effective date of this regulation.

[1988 WAC Supp—page 545]
(ii) Between the effective date of this regulation and eighteen months thereafter, existing facilities will operate under the terms and conditions of existing permits valid on the effective date of this regulation. Jurisdictional health departments shall incorporate compliance schedules into valid existing permits; such compliance schedules shall insure that existing facilities meet the effective dates of WAC 173-304-400(3).

(iii) New and expanded waste handling facilities shall meet the requirements of this section on the effective date of this regulation.

(2) Procedures for permits.

(a) Any owner or operator subject to the permit requirements who intends to operate a facility must apply for a permit with the jurisdictional health department. Filing shall not be complete until two copies of the application have been signed by the owner and operator and received by the jurisdictional health department, and the applicant has filed an environmental checklist required under the State Environmental Policy Act rules, chapter 197-11 WAC.

(b) Applications for a permit must contain the information set forth in subsection (3) of this section.

(c) Once the jurisdictional health department determines that an application for a permit is factually complete, it shall refer one copy to the appropriate regional office of the department for review and comment.

(d) The jurisdictional health department shall investigate every application to determine whether the facilities meet all applicable laws and regulations, conforms with the approved comprehensive solid waste handling plan and complies with all zoning requirements.

(e) The jurisdictional health department may establish reasonable fees for permits and renewal of permits. All permit fees collected by the health department shall be deposited in the county treasury in the account from which the health department's operating expenses are paid.

(f) The department shall report to the jurisdictional health department its findings on each permit application within forty-five days of receipt of a complete application or inform the jurisdictional health department as to the status of the application. Additionally, the department shall recommend for or against the issuance of each permit by the jurisdictional health department.

(g) When the jurisdictional health department has evaluated all pertinent information, it may issue a permit. Every completed solid waste permit application shall be approved or disapproved within ninety days after its receipt by the jurisdictional health department or the applicant shall be informed as to the status of the application.

(h) Except for applications specified in subsection (3)(h) of this section every permit issued by a jurisdictional health department shall be on a format prescribed by the department and shall contain specific requirements necessary for the proper operation of the permitted site or facility including the requirement that final engineering plans and specifications be submitted for approval to the jurisdictional health department.

(i) All issued permits must be filed with the department no more than seven days after the date of issuance.

(j) The owner or operator of a facility shall apply for renewal of the facility's permit annually. The jurisdictional health department shall annually:

(i) Review the original application for compliance with these regulations and submit such additional information as spelled out in subsection (4) of this section;

(ii) Review information collected from inspections, complaints, or known changes in the operations;

(iii) Collect the renewal fee;

(iv) Renew the permit; and

(v) File the renewed permit with the department no more than seven days after the date of issuance. The department shall review and may appeal the renewal as set forth in RCW 70.95.185 and 70.95.190.

(3) Application contents for permits for new or expanded facilities.

(a) All permit applications except for inert waste, demolition waste, special purpose landfills, woodwaste landfill and recycling facilities applications, which are specified in (h) of this subsection, shall contain the following:

(i) A general description of the facility;

(ii) The types of waste to be handled at the facility;

(iii) The plan of operation required by WAC 173-304-405(2);

(iv) The form used to record weights or volumes required by WAC 173-304-405(3);

(v) An inspection schedule and inspection log required by WAC 173-304-405(5); and

(vi) Documentation to show that any domestic or industrial waste water treatment facility, such as a leachate treatment system, is being reviewed by the department under chapter 173-240 WAC.

(b) Application contents for permits for new or expanded landfill facilities. In addition to the requirements of (a) of this subsection, each landfill application for a permit must contain:

(i) A geohydrological assessment of the facility that addresses:

(A) Local/regional geology and hydrology, including faults, unstable slopes and subsidence areas on site;

(B) Evaluation of bedrock and soil types and properties;

(C) Depths to ground water and/or aquifer(s);

(D) Direction and flow rate of local ground water;

(E) Direction of regional ground water;

(F) Quantity, location and construction (where available) of private and public wells within a two thousand foot radius of site;

(G) Tabulation of all water rights for ground water and surface water within a two thousand foot radius of the site;

(H) Identification and description of all surface waters within a one-mile radius of the site;

(I) Background ground and surface water quality assessment, and for expanded facilities, identification of impacts of existing facilities of the applicant to date upon ground and surface waters from landfill leachate discharges;
(J) Calculation of a site water balance;
(K) Conceptual design of a ground water and surface water monitoring system, including proposed installation methods for these devices and where applicable a vadose zone monitoring plan;
(L) Land use in the area, including nearby residences; and
(M) Topography of the site and drainage patterns.

(ii) Preliminary engineering report/plans and specifications that address:
(A) How the facility will meet the locational standards of WAC 173–304–130;
(B) Relationship of facility to county solid waste comprehensive plan and the basis for calculating the facility's life;
(C) The design of bottom and side liners;
(D) Identification of borrow sources for daily and final cover, and soil liners;
(E) Interim/final leachate collection, treatment, and disposal;
(F) Landfill gas control and monitoring;
(G) Trench design, fill methods, elevation of final cover and bottom liner, and equipment requirements; and
(H) Closure/post-closure design, construction, maintenance, and land use.

(iii) An operation plan that addresses:
(A) Operation and maintenance of leachate collection, treatment, and disposal systems;
(B) Operation and maintenance of landfill gas control systems;
(C) Monitoring plans for ground water, surface water, and landfill gases to include sampling technique, frequency, handling, and analyses requirements;
(D) Safety and emergency accident/fire plans;
(E) Routine filling, grading, cover, and housekeeping;
(F) Record system to address records on weights (or volumes), number of vehicles and the types of waste received;
(G) Vector control plans; and
(H) Noise control.

(iv) Closure plan to address:
(A) Estimate of closure season/year;
(B) Capacity of site in volume and tonnage;
(C) Maintenance of active fill versus completed, final covered acreage;
(D) Estimated closure construction timing and notification procedures;
(E) Inspection by regulatory agencies.
(v) Post–closure plan to address:
(A) Estimated time period for post–closure activities;
(B) Site monitoring of landfill gas, ground water, and surface water;
(C) Deed clause changes, land use, and zoning restrictions;
(D) Maintenance activities to maintain cover and run–off systems; and
(E) Identification of final closure costs including cost calculations and the funding mechanism.

(c) Application contents for new or expanded transfer stations, drop box facilities, and baling and compaction systems requiring a permit. In addition to the requirements of (a) of this subsection, each applicable application for a permit must contain preliminary engineering report/plans and specifications that address:
(i) The proposed facility's zoning status;
(ii) The relationship to the county solid waste comprehensive plan and the area to be served by the facility; and
(iii) The facility design to address how the facility shall meet requirements of WAC 173–304–410, including closure.

(d) Application contents for new or expanded surface impoundments requiring a permit. In addition to the requirements of (a) of this subsection, each applicable application for a permit must contain:
(i) A geohydrological assessment of the facility that addresses all of the factors of (b) (i) of this subsection;
(ii) Preliminary engineering report/plans and specifications that address, where applicable:
(A) How the proposed facility will meet the locational standards of WAC 173–304–130;
(B) The relationship of facility to the county solid waste comprehensive plan;
(C) The design of liners and foundation to be incorporated in the facilities design including the design leachate of collection and treatment systems;
(D) The design of ground water monitoring;
(E) The design of dikes including calculations on dike stability analyses under conditions of liner failure;
(F) Other design details, including sludge cleanout and disposal, overfilling alarms and inlet design; and
(G) Closure/post-closure design, construction maintenance and land use.

(iii) An operation plan that addresses:
(A) Operation and maintenance of leachate collection system, or ground water monitoring;
(B) Operation and maintenance of overfilling equipment or details of filling and emptying techniques;
(C) Inspection of dikes and liners for integrity; and
(D) Safety and emergency plans.
(iv) A closure plan to address:
(A) Estimate of closure year and cost;
(B) Methods of removing wastes, liners and any contaminated soils, and location of final disposal;
(C) Closure timing and notification procedures; and
(D) Final inspection by regulatory agencies.
(e) Application contents for new or expanded piles requiring a permit. In addition to the requirements of (a) of this subsection, each application for a permit must contain:
(i) Preliminary engineering reports/plans and specifications that address:
(A) How the proposed facility will meet the locational standards of WAC 173–304–130;
(B) The relationship of the facility to the county solid waste comprehensive plan and zoning;
(C) The design of the liner or sealed surface upon which the liner rests, including an analysis of the liners ability to withstand the stress;
(D) The design of the run–on and run–off system;
(E) The design to avoid washout when the pile is located in a one hundred year floodplain; and
(F) Maximum elevation and boundaries of the waste pile.
(ii) An operation plan that addresses:
(A) Methods of adding or removing wastes from the pile and equipment used;
(B) Inspection of the liner for integrity; and
(C) Safety and emergency plans.
(iii) A closure plan to address:
(A) Estimate of closure year and cost;
(B) Methods of removing wastes, liners and any contaminated soils, and location of final disposal;
(C) Closure timing and notification procedures; and
(D) Final inspection by regulatory agencies.
(f) Application contents for new or expanded energy recovery and incinerator facilities requiring a permit. In addition to the requirements of (a) of this subsection, each application for a permit must contain:
(i) Preliminary engineering reports/plans and specifications that address:
(A) The relationship of the facility to the county solid waste comprehensive plan and zoning;
(B) The design of the storage and handling facilities on-site for incoming waste as well as fly ash, bottom ash and any other wastes produced by air or water pollution controls; and
(C) The design of the incinerator or thermal treater, including changing or feeding systems, combustion air systems, combustion or reaction chambers, including heat recovery systems, ash handling systems, and air pollution and water pollution control systems. Instrumentation and monitoring systems design shall also be included.
(ii) An operation plan that addresses:
(A) Cleaning of storage areas as required by WAC 173–304–440 (2)(a);
(B) Alternative storage plans for breakdowns as required in WAC 173–304–440 (2)(c);
(C) Inspection to insure compliance with state and local air pollution laws and to comply with WAC 173–304–405(5). The inspection log or summary must be submitted with the application; and
(D) How and where the fly ash, bottom ash and other solid wastes will be disposed of.
(iii) A closure plan to address:
(A) Estimate of closure year and cost;
(B) Methods of closure and methods of removing wastes, equipment, and location of final disposal;
(C) Closure timing and notification procedures; and
(D) Final inspection by regulatory agencies.
(g) Application contents for new or expanded landspreading disposal facilities requiring a permit. In addition to the requirements of (a) of this subsection, each application for a permit must contain:
(i) A geohydrological assessment of the facility that addresses all of the factors of (b)(i) of this subsection;
(ii) Preliminary engineering reports/plans and specifications that address:
(A) How the proposed facility will meet the locational standards of WAC 173–304–130;
(B) The relationship of the facility to the county solid waste comprehensive plan and the basis for calculating the facility’s life;
(C) Waste analyses and methods to periodically sample and analyze solid waste;
(D) Design of interim waste storage facilities if such facilities are not otherwise permitted by the department;
(E) Design of run-on and run-off systems;
(F) A contour map of the active area showing contours to the nearest foot;
(G) A ground water and surface water monitoring program; and
(H) Access barriers such as fences, and warning signs.
(iii) An operation plan that addresses:
(A) Operation and maintenance of run-off and run-on systems;
(B) Methods of taking ground water samples and for maintaining ground water monitoring systems;
(C) Methods of applying wastes to meet the requirements of WAC 173–304–450 (2)(d):
(I) Estimated multiples of agronomic rates;
(II) Frequency of discing; and
(III) Avoidance of standing water.
(D) The written contract required between landowners, waste generators and waste operators.
(iv) Closure plan to address:
(A) Estimate of closure season/year;
(B) Capacity of site in volume and tonnage;
(C) Year-to-year maintenance of the active area versus completed, final covered acreage;
(D) Closure construction timing and notification procedures; and
(E) Final inspection by regulatory agencies.
(v) Post-closure plan to address:
(A) Estimated time period for post-closure activities;
(B) Site monitoring of ground water;
(C) Deed clause changes, land use, and zoning restrictions;
(D) Maintenance activities to maintain cover and run-off systems;
(E) Plans for food chain crops being grown on the active areas, after closure; and
(F) Identification of final closure costs including cost calculations and the funding mechanism.
(4) Application contents for existing facilities renewing permits. All owners or operators of existing facilities shall renew permits or application forms specified in subsection (3) of this section. Previous information submitted to the jurisdictional health department may be referred to on the application forms. Changes in operating methods or other changes must be noted on the application in order to be authorized by permit.
(5) Inspections. As a minimum, annual inspections of all permitted solid waste facilities shall be performed by
the jurisdictional health department. Any duly authorized officer, employee, or representative of the jurisdictional health officer or his designee having jurisdiction may enter and inspect any property, premises or place at any reasonable time for the purpose of determining compliance with this chapter, and relevant laws and regulations. Findings shall be noted and kept on file. A copy of the inspection report or annual summary shall be furnished to the site operator.

[WAC 173-309-020 Definitions. (1) "Collection days" means events such as, but not limited to, one-day projects in which moderate risk wastes are collected at centralized locations for subsequent packaging and transport to a permitted treatment storage or disposal facility.

(2) "Department" means the Washington state department of ecology.

(3) "Existing facility" means an owned or leased landfill in operation, or for which construction has begun, on or before the effective date of chapter 173-304 WAC for which the owner or operator has obtained permits or approvals necessary under federal, state and local statutes, regulations and ordinances. A facility has commenced construction if either:

(a) A continuous on-site physical construction program has begun; or

(b) The owner or operator has entered into contractual obligations which cannot be cancelled or modified without substantial financial loss. Physical construction of the facility is to be completed within a reasonable time.

Lateral extensions of a landfill's active area on land purchased and permitted by the jurisdictional health department for the purpose of landfilling before the effective date of chapter 173-304 WAC shall be considered existing facilities.

(4) "Hazard ranking system" means the system for ranking and prioritizing hazardous waste sites to be adopted by the department pursuant to chapter 70.105B RCW.

(5) "Hazardous waste planning and program grants" means grants to assist local governments in activities required by RCW 70.105.220, 70.105.225, 70.105.235 (1)(a), (b), and (c), and 70.105.260, including, but not limited to, collection and disposal of household hazardous waste.

(6) "Household wastes" means any waste material (including garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnicgrounds, and day use recreation areas).

(7) "Local governments" means any political subdivision, regional governmental unit, district, municipal or public corporation, including cities, towns, and counties. The term encompasses but does not refer specifically to the departments within a city, town, or county.

(8) "Minimum functional standards" means the requirements of chapter 173-304 WAC, Minimum functional standards for solid waste handling.

[1988 WAC Supp—page 549]
(9) "Moderate-risk waste" means:
   (a) Any waste that exhibits any of the properties of hazardous waste but is exempt from regulation under this chapter solely because the waste is generated in quantities below the threshold for regulation; and
   (b) Any household wastes which are generated from the disposal of substances identified by the department as hazardous household substances.

(10) "Pilot project" means a moderate-risk hazardous waste management feasibility study developed to provide detailed information for alternative moderate-risk waste management techniques or options.

(11) "Remedial action" means any action or expenditure, consistent with the purposes of chapter 70.105B RCW, to identify, eliminate, or minimize any threat or potential threat posed by hazardous substances to human health or the environment, including any investigative and monitoring activities with respect to any release or threatened release of a hazardous substance as well as any health assessments or health effects studies conducted in order to determine the risk or potential risk to human health.

(12) "Remedial action grants" means grants issued pursuant to this chapter for the purpose of carrying out remedial actions at public or private facilities used primarily for the disposal of municipal solid waste.

(13) "Settlement agreement" means any consent decree entered into pursuant to RCW 70.105B.080 or any consent order or decree with the department in effect October 16, 1987.

(14) "Solid waste disposal or management facility" means (for the purpose of this chapter only) any facility or system owned or operated by local governments for the purpose of controlling, collecting, storing, disposing, recycling, or recovery of solid wastes, including any equipment, structures, or property incidental to such purposes. This term shall not include the acquisition of equipment to collect residential or commercial garbage.

(15) "Solid waste planning and program grants" means grants to assist local governments in activities required under RCW 70.95.130 and 70.95.220.

WAC 173-309-030 Relation to other legislation and administrative rules. (1) Nothing in this chapter shall influence, affect, or modify department programs, regulations, or enforcement of applicable laws relating to hazardous and solid waste management and disposal.

(2) The remedial grants shall be used to supplement local government funding to carry out required remedial actions.

(3) Hazardous waste planning and program grants shall be awarded to local government to implement RCW 70.105.220, 70.105.235 (1)(a) and (b), 70.105.235(3), and 70.105B.220 (4)(b). Each local government must complete and submit a hazardous waste plan to the department for approval or disapproval by June 30, 1990, pursuant to RCW 70.105.220(7). Revisions of existing plans must meet local hazardous waste planning guidelines.

(4) Solid waste planning and program grants shall be awarded to implement RCW 70.95.010, 70.95.080, 70.95.090, 70.95.130, 70.95.140, 70.95.150, 70.105B.220 (4)(c), WAC 173-304-130 and 173-304-490. Each solid waste plan must be revised by June 7, 1989, pursuant to RCW 70.95.110 as outlined in the department's "Solid Waste Planning Guidelines, May 1986 and subsequent addenda.

(5) Recycling facility grants shall be awarded to only those projects fulfilling chapter 173-304 WAC and the state "Grant Guidelines for Solid Waste Disposal and Management" or any revisions thereto.

(6) Ground water monitoring grants shall be awarded to implement WAC 173-304-490. Ground water monitoring grants are to meet state "Grant Guidelines for Solid Waste Disposal and Management," or any revisions thereto.

(7) All grants shall be subject to existing accounting and auditing requirements of state laws and regulations applicable to the issuance of grant funds.


For purposes of implementing the interim financial assistance program, the local toxics account shall be apportioned between the following funding categories as follows:

(a) Remedial actions for public or private facilities used primarily for the disposal of municipal solid waste $9,000,000
(b) Hazardous waste plans and programs 2,300,000
(c) Solid waste plans and programs 1,500,000
(d) Solid waste disposal and management facilities 3,200,000

To be dispersed as follows:

(i) Recycling facility grants 2,200,000
(ii) Ground water monitoring grants 1,000,000

(2) Adjustment of funds. Based on a periodic internal review of grant applications received, grant obligations, grant fund balances, and revenue projections, the department may reallocate funds by grant category or re-adjust the amount of funds that may be allocated under any and all grant fund categories.

(3) Grant application process. Grant application deadlines and schedules will be announced for each of the funding priority grant programs.

Grant application packages which include grant application deadlines, guidelines, application forms, and detailed information will be provided to all interested parties.

When applications are received by the department, they will be reviewed and scored by a committee consisting of department personnel. Applications need to include all required elements, as outlined in the guidelines, in order to be competitive.

After an application is scored and an award letter is sent out, the department will contact the applicant to negotiate the final details of the scope of work, budget, and any other items of concern.

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A grant offer is made by the department to the applicant in the form of a grant contract when all applicant and project eligibility requirements have been met, funds are available, and the formal application has been completed to the mutual satisfaction of the applicant and the department.

A grant award is made when a grant contract offer has been signed by both the applicant and the department. The grant contract becomes effective on the date the program manager of the solid and hazardous waste program of the department signs the contract. This also establishes the beginning date of the project. No costs incurred prior to that date are grant eligible unless specific provision is made in the grant contract for such costs.

(4) Appropriation and allotment of funds. The obligation of the department to make grant payments is contingent upon the availability of funds through legislative appropriation and allotment, and such other conditions not reasonably foreseeable by the department rendering performance impossible. When the grant crosses over bienniums, the obligation of the department is contingent upon the allotment of funds during the next biennium.

(5) Administrative practices. All grants under this chapter shall be consistent with the provisions of Financial Guidelines for Grants Management, WDOE 80–6, May 1980, reprinted March 1982, or subsequent guidelines adopted thereafter.

(6) The department encourages cooperation and coordination among units of local government and any funds granted under this chapter may be used by any unit of local government through interagency agreements.

WAC 173–309–050 Remedial action grants. (1) Applicant eligibility. An applicant for a remedial action grant must be a local government which will use the grant for the purpose of planning and/or carrying out required remedial action at a public or private landfill site used primarily for the disposal of municipal solid waste.

An applicant must also meet one of the following requirements:
(a) Remedial action grants are for the purpose of assisting local governments to plan and carry out required remedial action at public or private facilities used primarily for the disposal of municipal solid waste.
(b) Costs are grant eligible if their purpose is to identify, eliminate, or minimize any threat or potential threat posed by hazardous substances to human health or the environment. This includes any investigative and monitoring activities with respect to any release or threatened release of a hazardous substance as well as any health assessments or health effect studies conducted in order to determine the risk or potential risk to human health. Costs eligible for grant funding include:
(i) Remedial investigations to define the extent and source of contamination;
(ii) Feasibility studies to develop and evaluate cleanup options;
(iii) Remedial design, including final engineering and preparation of plans and specifications needed to implement remedial action;
(iv) Monitoring;
(v) Methane control;
(vi) Excavating the site to remove or relocate contaminated materials, or removing and cleaning up drums, debris, and other contaminated materials;
(vii) Run-on/run-off water control systems;
(viii) Final cover;
(ix) Ground water treatment and control;
(x) In situ treatment technology;
(xi) Acquisitions of off-site property or property easements only for the purpose of gaining access to a facility requiring remedial action, or for the purpose of installing monitoring wells or other pollution abatement equipment or for other purposes relating to remedial action;
(xii) Fencing where waste disposal has terminated or to limit access to structures built to implement a remedial action;
(xiii) Other remedial action activities as determined by the department on a case–by–case basis.
(3) Retroactive funding. Retroactive funding will be allowed for all eligible work conducted under a signed settlement agreement. Retroactive funding may be allowed for costs incurred since October 16, 1987.

(4) Matching requirements. Up to fifty percent state funding will be available for eligible project costs as defined in subsection (2)(a)(i), (ii), (iii), and (iv) of this section; remedial investigations, feasibility studies, remedial design, and monitoring. Up to twenty-five percent state funding will be available for all other eligible project costs.

(5) Priority for allocation of grant funds. In evaluating applicants for remedial grants the department may consider the listing of the applicant on the hazard ranking list to be prepared by the department, pursuant to RCW 70.105B.030(3) or the ranking of the applicant on the hazard ranking system to be adopted by the department pursuant to RCW 70.105B.070(2).


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WAC 173-309-060 Hazardous waste planning and program grants. (1) Applicant eligibility.
   (a) Hazardous waste planning grants. Eligible local governments under this section are cities, towns, or counties pursuant to RCW 70.105.010(16).
   (b) Pilot projects. The applicant must be a local government as defined in WAC 173-309-020(7).
   (c) Collection days. The applicant must be a local government.

(2) Eligible project costs.
   (a)(i) Hazardous waste planning grants.
       Eligible costs include direct costs for activities and tasks necessary for developing or updating local hazardous waste management plans, if they are consistent with the department's Planning Guidelines for Local Hazardous Waste Plans, July 1987, WDOE 87-18.
       In-depth planning studies to provide detailed analysis of specific plan elements may be undertaken as a part of an overall planning grant, or separately if it can be demonstrated that the planning requirements are otherwise being met.
       (ii) Retroactive funding. Funding retroactive to October 16, 1987, will be allowed for costs incurred which are directly related to the preparation of local hazardous waste plans and are in conformance with Planning Guidelines for Local Hazardous Waste Plans, July 1987, WDOE 87-18 and subsequent addenda.
   (b) Collection days. Eligible costs include direct costs for all activities and tasks required to plan and carry out hazardous waste collection days for household and/or small quantity generator hazardous waste.
   (c) Pilot projects. Eligible costs include direct costs for all activities and tasks for projects that examine the technical, economic, and/or social feasibility of alternative moderate-risk waste reduction, recycling, or handling methods.

(3) Matching requirements.
   (a) Planning grants. Grants will be made for up to seventy-five percent of the total eligible project cost. Based on prior department approval, direct local costs of hazardous household substance pilot projects conducted between June 30, 1985, and June 30, 1988, may be subtracted from the twenty-five percent local share of total project costs.
   (b) Collection days. Grants will be made for up to fifty percent of the total eligible project cost, or fifteen thousand dollars per grant, whichever is the lesser amount.
   (c) Pilot projects. Grants will be made for up to fifty percent of the total eligible project cost, or fifty thousand dollars per project, whichever is the lesser amount.

(4) Priority for allocation of grant funds.
   (a) Planning grants. It is the department's intent that grants be awarded for all local hazardous waste plan development state-wide. The grants will be awarded on a first-come first-served basis, subject to availability of funds, technical adequacy, and application completeness.
   (b) Collection days. The grants will be awarded on a first-come first-served basis, subject to availability of funds, technical adequacy, and application completeness.

The maximum amount for which any one local government can apply, prior to January 1, 1989, is fifteen thousand dollars. No local governments can apply for a second collection day project until January 1, 1989. If the department has not obligated all funds allocated for collection days at that time, the unobligated funds may be used to fund repeat activities.

(5) Retroactive funding. Funding retroactive to October 16, 1987, will be allowed for costs incurred which are directly related to the preparation of local hazardous waste plans and are in conformance with Planning Guidelines for Local Hazardous Waste Plans, July 1987, WDOE 87-18 and subsequent addenda.

WAC 173-309-070 Solid waste planning and program grants. (1) Applicant eligibility. Eligible local governments under this section are counties and cities pursuant to RCW 70.95.130.

(2) Eligible project costs.
   (a) General. Costs for developing or updating local solid waste management plans are grant eligible if:
       (i) They are necessary to conduct the project;
       (ii) They are consistent with department's solid waste planning guidelines and subsequent addenda.
   (b) Retroactive. Funding retroactive to October 16, 1987, will be allowed for costs incurred which are directly related to the preparation of local solid waste plans and are in conformance with the state Solid Waste Planning Guidelines, May 1986, WDOE 86-4 and subsequent addenda.

(3) Matching requirements. Grants will be made for up to fifty percent of the total eligible project cost.

(4) Allocation of grant funds. It is the department's intent that grants be awarded for developing or updating local solid waste management plans state-wide. Subject to the limits of available funds, those applications that meet eligibility requirements will be approved for funding on a first-come first-served basis.

WAC 173-309-080 Solid waste disposal and management facilities—Recycling facility grants. (1) Applicant eligibility. Recycling facilities are eligible provided that:
(a) It is demonstrated that the proposed recycling activity or service is not reasonably available to persons within the locale from private enterprise; and
(b) It is demonstrated that the recycling project is economically feasible and suitable for successful implementation.

(2) Eligible project costs.
(a) General. Costs are grant eligible if:
(i) They are necessary to conduct the project;
(ii) They are consistent with the department's Grant Guidelines for Solid Waste Disposal and Management, May 1988.

(b) Recycling facility. Eligible costs include direct costs for yard and garden waste composting facilities, and other recycling facilities. These costs include:
(i) Planning and feasibility studies, environmental impact statements, and permitting costs;
(ii) Preparation of design documents;
(iii) Facility construction;
(iv) Purchase of specialized equipment.

(3) Matching requirements. Grants will be made for up to seventy-five percent of the total eligible project costs, not to exceed a maximum of fifty thousand dollars per local government.

(4) Priority for allocation of grants. Grant application will be ranked according to how each application meets the criteria set forth below. Grants will be awarded within the limits of available funds to the highest ranking applications that otherwise meet provisions for completeness and technical adequacy. The ranking criteria are as follows:
(a) Ability to pay. Priority will be given to local governments in economically distressed areas.
(b) How, or if, the project will contribute directly to the solution of an existing environmental or public health problem.

(5) Retroactive funding will be allowed for all eligible work for costs incurred since October 16, 1987.

[Statutory Authority: RCW 70.105B.220 and 70.95.220. 88-17-001 (Order 88-26), § 173-312-010, filed 8/4/88.]

Chapter 173-312 WAC

LOCAL SOLID WASTE ENFORCEMENT GRANT REGULATION

WAC 173-312-010 Introduction.
173-312-020 Purpose and authority.
173-312-030 Applicant eligibility.
173-312-040 Application.
173-312-050 Criteria for allocation of funds.

WAC 173-312-010 Introduction. RCW 70.95.220 provides that any jurisdictional health department may apply to the department of ecology for financial aid for the enforcement of rules and regulations promulgated under chapter 70.95 RCW. RCW 70.95.220 further provides that after receipt of such applications, the department may allocate available funds according to criteria established by regulation. Such criteria shall consider or be based upon population, urban development, the number of disposal sites, and geographical area.

[Statutory Authority: RCW 70.105B.220 and 70.95.220. 88-17-001 (Order 88-26), § 173-312-010, filed 8/4/88.]

WAC 173-312-020 Purpose and authority. The purpose of this regulation is to establish criteria by which the department of ecology shall allocate financial aid, pursuant to chapter 70.105B RCW, to jurisdictional health departments for enforcement of rules and regulations promulgated under chapter 70.95 RCW.

[Statutory Authority: RCW 70.105B.220 and 70.95.220. 88-17-001 (Order 88-26), § 173-312-020, filed 8/4/88.]

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WAC 173-312-030 Applicant eligibility. In order to be eligible for grant funding, the local health department must:

1. Be a "jurisdictional health department" as defined by RCW 70.95.030;
2. Have a program to achieve the goals of chapter 70.95 RCW;
3. Have a solid waste ordinance per chapter 70.95 RCW, or be in the process of adoption.

[Statutory Authority: RCW 70.105B.220 and 70.95.220. 88-17-001 (Order 88-26), § 173-312-030, filed 8/4/88.]

WAC 173-312-040 Application. Application for funds shall be made on forms provided by the department and shall include detailed information specified in a guidance document also provided by the department. This detailed information shall include a confirmation of the applicant's eligibility, and a description of the program and budget.

[Statutory Authority: RCW 70.105B.220 and 70.95.220. 88-17-001 (Order 88-26), § 173-312-040, filed 8/4/88.]

WAC 173-312-050 Criteria for allocation of funds. As specified in RCW 70.95.220, first priority will be to provide funds exclusively for solid waste inspection activities, including staff for administration of the local inspection program. The following criteria will be used to assist in the allocation of those funds:

1. Protection of public health and environment.
2. Cost to residential ratepayers without state assistance.
3. Actions required under federal, state and local regulations, and consent decrees.
4. Commitment/readiness to proceed.
5. Degree of local solid waste problems, as measured by these factors:
   a. Number of existing disposal sites, open and closed;
   b. Environmental sensitivity of the geographical area;
   c. Disposal sites and other waste management facilities, open and closed;
   d. Current enforcement actions;
   e. Extent of urban development and its relationship to industrial, commercial, and residential development; and
   f. Population.

[Statutory Authority: RCW 70.105B.220 and 70.95.220. 88-17-001 (Order 88-26), § 173-312-050, filed 8/4/88.]

Chapter 173-326 WAC
COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL—SITE USE PERMITS

WAC 173-326-010 Purpose. The purpose of this chapter is to implement RCW 43.200.080. Each original generator and each broker of low-level radioactive waste (LLRW) shall have a valid and unencumbered site use permit prior to shipment of such waste to, or disposal of such waste at, a commercial LLRW disposal site located in the state of Washington. All low-level radioactive waste received for disposal at a commercial LLRW disposal site in the state of Washington shall be traceable to the original generators and states, regardless of whether the waste is shipped directly from the point of generation to the disposal facility, or shipped through a licensed service facility such as a facility for recycling, processing, compacting, incinerating, collecting, or brokering waste.

[Statutory Authority: RCW 43.200.080. 88-18-098 (Order 88-27), § 173-326-010, filed 9/7/88; 87-14-078 (Order 87-11), § 173-326-010, filed 7/1/87.]

WAC 173-326-020 Definitions. (1) "Low-level radioactive waste" is defined in Public Law 99-240.

2. "Broker" means a person who performs one or more of the following functions for a low-level radioactive waste generator, provided it shall not mean a carrier whose sole function is to transport such low-level radioactive waste:
   a. Arranges for transportation of the low-level waste;
   b. Collects and/or consolidates shipments of such low-level radioactive waste;
   c. Processes such low-level radioactive waste in some manner.

3. "Department" means the department of ecology.
4. "Generator" means the last person who puts radioactive material to practical use, who then declares it to be no longer of use or value.
6. "Shipment" means the total low-level radioactive waste material transported in one vehicle.

[Statutory Authority: RCW 43.200.080. 87-14-078 (Order 87-11), § 173-326-020, filed 7/1/87.]

WAC 173-326-030 Requirements for users of the Washington commercial low-level radioactive waste disposal site. (1) A site use permit must be obtained prior to:
   a. The shipment of LLRW to a LLRW disposal site.
   b. The disposal of LLRW at a LLRW disposal site.

(2) An application for a site use permit must be filed:
   a. An application for a site use permit shall be filed on department form ECY 010-75.
   b. Each application shall be signed by the applicant.

(3) Number of permits required:
   a. Generators who own multiple facilities within the same state may apply for one permit, provided the same contact person within the generator's company will be responsible for the waste shipments. Otherwise separate permits will be required.
(b) Facilities which are owned by the same generator and located in different states will require separate permits.

(4) A broker must ensure that a generator has a current, unencumbered site use permit prior to shipment of that generator's waste to a commercial LLRW disposal site located in the state of Washington, and that the waste will arrive at the disposal site prior to the expiration date of the generator's permit.

(5) Permittees must provide additional information when requested by the department of ecology as necessary for the safe management of low-level radioactive waste in the state of Washington.

[Statutory Authority: RCW 43.200.080. 88-21-072 (Order 88-41), § 173-326-030, filed 10/18/88; 87-14-078 (Order 87-11), § 173-326-030, filed 7/1/87.]

WAC 173-326-040 Site use permit fee. (1) The permit fee must be submitted at the time of filing an application. The permit fee is not refundable. The fees for a site use permit are:

(a) One-time use permit – $ 60.00
(b) Multiple use permit – $175.00 per year

(2) One-time use permit: A generator having radioactive waste for disposal for one time only can obtain a nonrenewable site use permit for such a shipment. This permit terminates upon receipt of the shipment for disposal or one year after it was issued, whichever is earlier, and cannot be reissued to a generator. If the same generator has a subsequent need to ship waste for disposal a multiple use permit must be obtained.

(3) Multiple-use permit: A generator having radioactive waste for disposal more than once can obtain a renewable multiple use permit. A multiple-use permit can be renewed annually. A generator who holds a multiple use permit cannot change the permit to a one-time use permit.

[Statutory Authority: RCW 43.200.080. 88-18-098 (Order 88-27), § 173-326-040, filed 9/7/88; 87-14-078 (Order 87-11), § 173-326-040, filed 7/1/87.]

Chapter 173-335 WAC

VEHICLE TIRE RECYCLING AND REMOVAL GRANT REGULATION

WAC

173-335-010 Purpose and authority.
173-335-020 Definitions.
173-335-030 Relation to other legislation and administrative rules.
173-335-040 General.
173-335-050 Administration.

WAC 173-335-010 Purpose and authority. The purpose of this chapter is to set forth eligibility criteria and requirements for the conduct of a vehicle tire recycling and removal program pursuant to RCW 70.95.530. The department shall provide grants to local government for:

(1) Removal of discarded vehicle tires from unauthorized dump sites;

(2) Programs and projects that encourage storage, proper disposal, and recycling of discarded vehicle tires, and to stimulate private recycling programs throughout the state.

This chapter is designed to provide assistance to local governments in carrying out these vital functions pursuant to chapter 70.95 RCW.

[Statutory Authority: RCW 70.95.260. 88-17-002 (Order 88-25), § 173-335-010, filed 8/4/88.]

WAC 173-335-020 Definitions. (1) "Department" means the Washington state department of ecology.

(2) "Local governments" means any political subdivision, regional governmental unit, district, municipal or public corporation, including cities, towns, and counties. The term encompasses but does not refer specifically to the departments within a city, town, or county.

[Statutory Authority: RCW 70.95.260. 88-17-002 (Order 88-25), § 173-335-020, filed 8/4/88.]

WAC 173-335-030 Relation to other legislation and administrative rules. (1) Nothing in this chapter shall influence, affect, or modify department programs, regulations, or enforcement of applicable laws relating to hazardous and solid waste management and disposal.

(2) All grants shall be subject to existing accounting and auditing requirements of state laws and regulations applicable to the issuance of grant funds.

[Statutory Authority: RCW 70.95.260. 88-17-002 (Order 88-25), § 173-335-030, filed 8/4/88.]

WAC 173-335-040 General. (1) The obligation of the department to make grant payments is contingent upon the availability of funds through legislative appropriation and allotment, and such other conditions not reasonably foreseeable by the department rendering performance impossible. When the grant crosses over bienniums, the obligation of the department is contingent upon the allotment of funds during the next biennium.

(2) All grants under this chapter shall be consistent with the provisions of Financial Guidelines for Grants Management, WDOE 80-6, May 1980, reprinted March 1982, or subsequent guidelines adopted thereafter.

[Statutory Authority: RCW 70.95.260. 88-17-002 (Order 88-25), § 173-335-040, filed 8/4/88.]

WAC 173-335-050 Administration. (1) Application for funds shall be made on forms provided by the department and shall include detailed information specified in a guidance document also provided by the department. Application information shall include a confirmation of eligibility and a description of the program and budget.

(2) Applicant eligibility
(a) Applicant must be a local government.
(b) Applicant must have, be processing, or have scheduled an update for a local solid waste management plan.

(3) Eligible project costs

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Direct costs related to vehicle tire recycling and removal.
(4) Matching requirements
Grants will be made up to seventy-five percent of the total eligible project costs.
(5) Criteria for allocation of funds
Grants are to be awarded on a competitive basis. Applications will be evaluated on the following criteria:
(a) Number of illegally disposed tires;
(b) Solid waste management priorities of chapter 70-.95 RCW;
(c) Solid waste plan which involves tires;
(d) Local tire ordinance;
(e) Generation of information;
(f) Innovation.

Chapter 173-336 WAC
INITIAL INVESTIGATION REGULATION

WAC 173-336-010 Purpose and authority. The purpose of this chapter is to establish requirements for the initial investigation of a site reported to the department as a suspected hazardous substance site. The object of the initial investigation is to confirm a report or complaint to the department about a suspected hazardous substance site. The result of the initial investigation is a judgment about the site, to decide whether or not it is a site where a hazardous substance has been released or threatens release and whether or not the site requires further investigation.

RCW 70.105B.030 (2)(b) requires the department to establish a reasonable deadline, not to exceed ninety days, for initiating an investigation of a hazardous substance site after the department has received information that a site may pose a threat to human health or the environment.

The department is, as of July 1988, in the process of developing a set of rules and guidance for the implementation of chapter 70.105B RCW. The department intends to revise this rule in conjunction with the adoption of other final rules to ensure that this rule is consistent, integrated, and coordinated with the set of rules and guidance being developed under chapter 70.105B RCW.

WAC 173-336-020 Definitions. (1) "Department" means the department of ecology.
(2) "Environment" means the surface waters, groundwater, drinking water supply, land surface, tidelands, bedlands, subsurface, or ambient air within Washington or under jurisdiction of the state.

WAC 173-336-030 General. (1) When the department receives information and has a reasonable basis to believe that there may be a release or a threatened release of a hazardous substance that may pose a threat to human health or the environment, the department shall investigate within ninety days.
(2) An initial investigation shall at a minimum include:
(a) Site visit;
(b) Documentation of conditions observed;
(c) Documentation for any other applicable statute or regulation if appropriate; and
(d) If necessary, a recommendation for follow-up action.
(3) The department shall not be required to conduct an initial investigation within ninety days when:
(a) The circumstances associated with the release or threatened release are known and have previously been investigated by the department or another governmental agency;
(b) The person potentially liable for a release or threatened release has, in the department’s judgment, taken an appropriate remedy; or
(c) The release is otherwise permitted.
(4) The department may have another governmental agency conduct an initial investigation on its behalf, provided such agency is not suspected to have contributed to the release or threatened release of a hazardous substance.

Chapter 173-338 WAC
HAZARD RANKING SYSTEM REGULATION

WAC 173-338-010 Purpose. This regulation implements RCW 70.105B.030 (2)(a) of the Hazardous Waste Cleanup Act of 1987. The purpose of this regulation is to establish criteria for determining priorities
among hazardous substance sites and to assure that sites are ranked by a system that objectively and numerically assesses the relative degree of risk to human health and the environment at such sites. The departments of ecology and social and health services shall coordinate in the ranking of hazardous substance sites according to the scoring procedure guidance to be developed. The department of ecology shall use categorical rankings derived from site scores as a primary factor in establishing its remedial action priorities.

The department is, as of July 1988, in the process of developing a set of rules and guidance for the implementation of chapter 70.105B RCW. The department intends to revise this rule in conjunction with the adoption of other final rules to ensure that this rule is consistent, integrated, and coordinated with the set of rules and guidance being developed under chapter 70.105B RCW.

[Statutory Authority: RCW 70.105B.030(2). 88-15-037 (Order 88-5), § 173-338-010, filed 7/15/88.]

**WAC 173-338-020 Definitions.** When used in this regulation, the following terms have the meanings given below:

1. "Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells or springs.

2. "Bioconcentration potential" means the propensity of a substance to be retained and accumulated in an organism into which it has been absorbed.

3. "Containment" means a container, vessel, barrier, or structure, whether natural or constructed, by which a hazardous substance is prevented or hindered from release to or migration in the environment.

4. "Contamination" means the polluting or rendering unclean or impure the air, land or waters of the state, or making the same injurious to public health, harmful for commercial or recreational use, or harmful to fish, bird, or other animal or plant life.

5. "Department" means the department of ecology.

6. "Environment" means the surface waters, groundwater, drinking water supply, land surface, soils, tidal lands, shorelands, sediments, subsurface, or ambient air within Washington or under jurisdiction of the state.

7. "Exposure" means subjection to the action, influence, or effects of a substance or condition.

8. "Groundwater" means water in a saturated zone or stratum beneath the surface of land or water.

9. "Hazardous substance" means any solid, semi-solid, dissolved solid, liquid, or gaseous material which meets the definition of hazardous substance in RCW 70.105B.020(6).

10. "Hazardous substance site" means any area or location, confirmed through an initial investigation and requiring further investigation, where a hazardous substance has been deposited, released, stored, disposed of, or placed, or otherwise come to be located.

11. "Mobility" means the capability of a substance to move or be moved from one place to another.

12. "Persistence" means the tendency of a substance to resist degradation and remain in the atmosphere, soil, and/or water.

13. "Release" means any intentional or unintentional discharge, deposit, injection, dumping, pouring, pumping, emission, emptying, leaching, or allowing to seep of a substance into the environment.

14. "Remedial action" means any action or expenditure consistent with the purposes of chapter 70.105B RCW to identify, eliminate, or minimize any threat or potential threat posed by hazardous substances to human health or the environment, including investigative and monitoring activities with respect to any release or threatened release of a hazardous substance and any health assessments or health effects studies conducted in order to determine the risk or potential risk to human health.

15. "Risk" means a measure of the probability and severity of adverse effects caused by the circumstances of the exposure.

16. "Sensitive environment" means an area of particular environmental value, such as wetlands, critical habitat for endangered or threatened species, national or state wildlife refuge, critical habitat, breeding or feeding area for fish or shellfish, wild or scenic river, rookery, riparian area, big game winter range, or other area of special environmental concern.

17. "Site" means the same as "hazardous substance site."

18. "Site inspection" means an on-site survey of a site and may include collection of samples. The purpose is to gather sufficient data at a site or facility and in its vicinity to determine the existence and type of contamination at the site and its potential and actual threat to public health and the environment.

19. "Solubility" means a measure of the ability of a substance to exist in solution at a specified pressure and temperature, usually expressed in units of mass per unit volume of solvent.

20. "Surface water" means those portions of Puget Sound, the Strait of Juan de Fuca, the Strait of Georgia, and the Pacific Ocean within the boundaries of Washington or its jurisdiction, and all public or privately owned natural or constructed lakes, bays, rivers, streams, springs, ponds, impoundments, marshes, water courses, and drainage courses within the state or its jurisdiction.

21. "Toxicity" means a measure of the propensity of a chemical molecule or compound to produce injury once it reaches a susceptible receptor in or on a living organism.


**WAC 173-338-030 Evaluation criteria.** The objective of the site evaluation is to determine, as far as possible at the time of investigation, the actual or potential risk posed by the site to human health and the environment. This assessment considers air, groundwater, and

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surface water migration pathways, human and nonhuman exposure targets, properties of the hazardous substances present, and the interaction of these variables. The department shall evaluate each site on a consistent basis considering the following criteria:

1. Observed or documented release of hazardous substances to the environment at the site.
2. Documented exposure of human and nonhuman organisms to hazardous substances released at the site, excluding worker exposure to industrial chemicals and residential exposure to residential consumer products.
3. Identification of hazardous substances on the site, including what was released and/or what products of decomposition, recombination, or chemical reaction are currently present on site, and their quantities or concentrations.
4. Toxicity of the hazardous substances present at the site to human beings and nonhuman organisms which are or potentially may be affected.
5. Persistence of the hazardous substances present at the site.
7. Subsurface mobility of the hazardous substances.
8. Bioconcentration potential of the hazardous substances, relevant to potentially exposed organisms.
9. The hazardous substances' airborne mobility potential, as particulate matter and as vapor.
10. Quality of containment of the hazardous substances, whether natural or constructed, including impermeable substrata, surface impoundments, storage tanks and containers, waste piles, landfills, and handling techniques, where relevant.
11. Runoff potential at the site, including:
   a. Type of surface soil;
   b. Surface permeability at the site;
   c. Overland distance of a course that runoff might follow from the site to the nearest downhill body of surface water;
   d. The site's location relative to 100-year, 50-year, and 25-year floods.
12. Precipitation at the site, including:
   a. Annual precipitation;
   b. Maximum 24-hour rainfall in any twenty-five year period;
   c. Net annual or seasonal precipitation, as precipitation less evaporation.
13. Human population currently or potentially affected by surface water or groundwater contamination caused by the site through drinking water, nondrinking residential use, or recreational use, and its distance from the site.
14. Critical aquatic habitats, fishery resources, critical wildlife habitats, recreation areas, agricultural or forest lands, irrigated areas, parks, and sensitive environments currently or potentially affected by groundwater or surface water contamination caused by the site, and their respective distances from the site.
15. Characterization of the subsurface and groundwater actually or potentially affected by the site, including:
   a. Permeability of the unsaturated zone at or beneath the site;
   b. Usage of the water from the aquifers at or beneath the site;
   c. Depth to the aquifers below the site;
   d. Distance from the site to the nearest wells.
16. Human population, recreation areas, parks, sensitive environments, agricultural or harvestable forest land, critical wildlife habitats, and aquatic resources actually or potentially affected by airborne contaminants from the site, and their respective air route distances from the site.
17. Natural sedimentation rate at the site.
18. Degree of current or potential exposure of aquatic and benthic populations to contaminants on site.
19. Any other physical factors which may be significant in estimating the potential or current exposure to sensitive biota.

WAC 173–338–040 Scoring procedure. Evaluation of each site shall be done jointly by the department of ecology and department of social and health services, according to guidance provided by the department which shall include a detailed scoring manual and worksheets. The scoring procedure and major amendments to the guidance shall be reviewed by the science advisory board, established pursuant to RCW 70.105B.030(4). A primary objective is consistent application of the scoring method. The scoring manual shall include, but not necessarily be limited to, the following information:

1. Scoring and categorical ranking instructions.
2. Data requirements for each evaluation criterion.
3. Scoring values for each data item.
4. Algorithms for each evaluation section and the overall score.
5. Guidelines for application of the scoring values for particular cases and circumstances.
6. Instructions for prescreening the data to ensure their completeness before scoring a site.
7. Reference documentation for data items where applicable.
8. Scoring worksheets.
11. Audit procedures.

WAC 173–338–050 Rescoring. The department may, at its discretion, rescore a site if, before cleanup action is begun at the site, the receipt of additional information within the scope of the evaluation criteria indicates a significant change in score may result.
HAZARDOUS WASTE CLEANUP SETTLEMENT PROCEDURES

WAC 173-340-010 Purpose. These regulations implement RCW 70.105B.070 which requires that the department provide, by rule, procedures by which potentially liable persons may propose and negotiate settlement agreements for releases or threatened releases of hazardous substances that require remedial action. These regulations provide for public notice and an opportunity to comment on proposed settlements and establish time periods for accomplishment of activities required by RCW 70.105B.070. These regulations are interim and will be amended by final regulations.


WAC 173-340-020 Definitions. (1) "Department" means the department of ecology.

(2) "Director" means the director of the department of ecology or such person authorized to act for the director.

(3) "Final cleanup" means a remedial action which will achieve cleanup levels required by RCW 70.105B.060.

(4) "Potentially liable person" means any person whom the department finds, based upon credible evidence, to be liable under RCW 70.105B.040.

(5) "Remedial action" or "remedy" means any action or expenditure consistent with the purposes of chapter 70.105B RCW to identify, eliminate, or minimize any threat or potential threat posed by hazardous substances to human health or the environment including any investigative and monitoring activities with respect to any release or threatened release of a hazardous substance and any health assessments or health effects studies conducted in order to determine the risk or potential risk to human health. This definition includes, but is not limited to, the remedial investigation/feasibility study and the remedial design/remedial action implementation defined in subsections (6) and (7) of this section.

(6) "Remedial investigation/feasibility study" means:

(a) A remedial investigation to gather the data necessary and sufficient to: Determine the nature and extent of a release or threatened release of a hazardous substance; establish target cleanup levels and monitoring methods; identify remedial action alternatives; and support the technical and cost analyses of the alternatives; and

(b) A feasibility study which includes: An evaluation of the technical, environmental, and economic aspects of alternative remedial actions; a recommendation for the preferred remedial action; and cost estimates and a preliminary construction schedule for the remedial action.

(7) "Remedial design/remedial action implementation" means:

(a) An action where the selected remedy is clearly designed and/or specified in accordance with engineering criteria, for example, site action plan, relocation plan, or engineering drawings and specifications, in a bid package, enabling immediate implementation of the remedy; and

(b) The implementation of a remedial action, normally following design, of the selected source control and/or off-site remedial measure. Remedial action implementation may include, but is not limited to, final cleanup.


WAC 173-340-030 Emergency actions. (1) The provisions of this chapter shall not apply if the director determines, pursuant to RCW 70.105B.110 and 70-.105B.120, that an emergency or imminent danger exists which requires immediate remedial action to protect human health or the environment.

(2) Nothing in this chapter shall be construed to limit the authority of the department, its employees, agents or contractors to take appropriate action in the event of an emergency or imminent danger to human health or the environment.


WAC 173-340-040 Settlement procedures. (1) The department encourages persons to investigate and clean up sites for which they are responsible. Any potentially liable person wishing to enter into a settlement with the department for remedial action may request the department to initiate the procedures described in subsections (3) through (9) of this section. The procedures described in subsections (3) through (9) of this section shall not be considered the exclusive procedures for settlement under chapter 70.105B RCW. The department may agree to use alternate procedures consistent with chapter 70.105B RCW which are proposed by potentially liable persons. The alternate procedures must be approved by the director.

(2) Prior to the issuance of special notice letters under this section, the department encourages ongoing discussions and exchanges of information between the department and persons who might be potentially liable regarding those sites which the department has reason to believe may require remedial action.

(3) Special notice letters. When the department has reason to believe that a release or threatened release of a hazardous substance will require remedial action, and when the department is prepared to proceed with settlement procedures, it shall issue special notice letters to the potentially liable persons. Special notice letters shall be signed by the director and sent via certified mail, return receipt requested, or by personal service. The department shall not be required to issue special notice letters to potentially liable persons under this chapter if

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Notice letters have been issued prior to the effective date of these regulations.

(4) Contents of special notice letters.

(a) Special notice letters shall include the following:

(i) A statement informing the recipient that the department has identified that person as a potentially liable person under chapter 70.105B RCW or other applicable laws regarding the release of hazardous substances;

(ii) A statement that the department has determined that remedial action will be required to protect human health or the environment;

(iii) Identification of the site where there is a release or threatened release of hazardous substances and, to the extent known by the department, the nature of such hazardous substances;

(iv) The proposed elements of the scope of work for remedial action required at the site; and

(v) A list of all potentially liable persons identified by the department who are also receiving special notice letters concerning the site.

(b) Special notice letters may include a draft consent decree and other information as appropriate under the circumstances.

(c) Special notice letters shall require the potentially liable person to submit, within thirty days of receipt, a written response to the department via certified mail or by personal service. The written response shall include the following:

(i) A statement indicating whether or not the potentially liable person wishes to proceed with the settlement procedures defined in this chapter and intends to submit a good faith offer for undertaking or financing remedial actions required at the site; and

(ii) The name, address, and phone number of a representative who is authorized to negotiate on behalf of the potentially liable person. Submission of a written response as required by this subsection is not an admission of liability.

(d) The department may extend the deadline for response to the special notice letter and provide additional time as it deems appropriate.

(5) Good faith offers.

(a) The potentially liable persons, individually or collectively, shall submit a good faith offer to the department within sixty days of receipt of a special notice letter.

(b) A good faith offer shall provide a sufficient basis for further negotiations and shall consist of:

(i) A response to each proposed element of the scope of work accompanying the special notice letter;

(ii) A paragraph by paragraph response to any draft consent decree accompanying the special notice letter;

(iii) A statement of willingness to conduct or finance a remedial action as described in the response to the proposed elements of the scope of work and any draft consent decree accompanying the special notice letter;

(iv) A demonstration of the technical capability of the potentially liable person(s) to undertake the remedial action. This will require that the potentially liable person(s) identify whom they expect to conduct the remedial actions required or the process they will undertake to select a qualified firm; and

(v) A demonstration of the capability of the potentially liable person(s) to finance the remedial action required.

(c) The department will determine whether or not the offer submitted constitutes a good faith offer. If the department determines the offer submitted under this subsection is not a good faith offer, it shall notify the potentially liable person(s) who submitted the offer.

(d) The department may extend the deadline for receipt of a good faith offer and provide additional time as it deems appropriate.

(6) Negotiation period.

(a) Following the department's determination that it has received a good faith offer, the department shall negotiate with the potentially liable person(s) to reach a settlement agreement within a period not to exceed:

(i) In the case of a remedial investigation/feasibility study, ninety days from the date of receipt of the special notice letter; and

(ii) In the case of a remedial design/remedial action implementation, one hundred twenty days from the date of receipt of the special notice letter.

(b) The department may extend the period of negotiation and provide additional time as it deems appropriate.

(c) The department shall negotiate with the potentially liable person(s) to achieve reasonable deadlines for investigating and remediating releases or threatened releases at the site. The department shall ensure that cleanup levels required under RCW 70.105B.060 are attained.

(d) The department may negotiate with the potentially liable person(s) to reach a settlement agreement which addresses one or more stages or elements of remedial action. Such stages or elements include, but are not limited to, remedial investigation, feasibility studies, remedial design, remedial action implementation, or components thereof.

(7) Final settlement offer procedures.

(a) This subsection applies only when the special notice letter has required final cleanup as defined in WAC 173-340-020(3).

(b) The potentially liable persons, individually or collectively, may submit a final settlement offer for final cleanup and any supporting material for consideration by the department. A final settlement offer must be received by the department no later than ten days after:

(i) The potentially liable person(s) fail to state in writing that they wish to proceed with the settlement process in accordance with subsection (4) of this section;

(ii) A determination is made by the department that a good faith offer has not been received as required by subsection (5) of this section; or

(iii) The negotiation period has expired in accordance with subsection (6) of this section.

(c) Upon receipt of a final settlement offer provided for in this subsection, the department shall prepare a
notice of receipt of a final settlement offer and its availability for public review and invite public comments. The notice shall be published, at a minimum, in one newspaper of general circulation in the vicinity of the site.

(d) The department shall receive written comments on the final settlement offer for at least thirty days from the date of publication.

(e) If the department accepts the final settlement offer, it shall file it as a proposed consent decree in accordance with subsection (8) of this section.

(f) If the department rejects the final settlement offer, it shall state its reasons for rejection to the potentially liable person(s) via certified mail, return receipt requested, or by personal service.

(8) Consent decree procedures.

(a) Upon agreement between the department and the potentially liable person(s) for voluntary remedial action, a proposed consent decree shall be filed promptly with the appropriate superior court or the federal court having jurisdiction over the matter.

(b) Upon filing a proposed consent decree, the department shall prepare a public notice. Such notice shall inform the public that an agreement has been reached, state its availability for public review and invite public comments. This notice shall be placed, at a minimum, in one newspaper of general circulation in the vicinity of the site.

(c) The department shall receive written comments for at least thirty days from the date on which the proposed consent decree was filed with the court. The department shall file with the court all written comments received within the public comment period.

(d) If the parties agree to substantial changes to the proposed consent decree, the department shall place a notice in, at a minimum, one newspaper of general circulation in the vicinity of the site. Such notice shall inform the public that an agreement has been reached which substantially differs from that previously subject to public comment. It shall also state that the revised proposed consent decree is available for public review and invite public comment. Comments shall be received for at least thirty days and shall be filed by the department with the court.

(9) Enforcement. The department may terminate settlement procedures and proceed with an enforcement action against a potentially liable person as provided in RCW 70.105B.120 or other applicable laws and may conduct remedial actions as provided in RCW 70.105B-.110 (2)(b) under the following circumstances:

(a)(i) When the potentially liable person fails to state in writing, in accordance with subsection (4) of this section, that it wishes to proceed with the settlement procedures; and

(ii) The final settlement offer procedures in subsection (7) of this section do not apply; or

(b) If the department determines that:

(i) A good faith offer has not been received from the potentially liable person in accordance with subsection (5) of this section; and

(ii) The final settlement offer procedures in subsection (7) of this section do not apply; or

(c)(i) If no settlement is reached with the potentially liable person within the time periods specified in subsection (6) of this section; and

(ii) The final settlement offer procedures in subsection (7) of this section do not apply; or

(d) If the department does not receive a final settlement offer from the potentially liable person in accordance with subsection (7) of this section.


WAC 173-340-050 State conducted remedial action—Notice. (1) Upon determination by the department to conduct remedial action, the department may prepare a proposed scope of work as provided in RCW 70.105B-.120 (7)(a).

(2) Upon preparation of a scope of work for state conducted remedial action, the department may publish a notice of its proposed scope of work, at a minimum, in one newspaper of general circulation in the vicinity of the site and indicate where the scope of work is available for review. Upon publication of such notice, comments shall be received for thirty days. Following receipt of comments, the department may revise the scope of work to include such comments or adopt its proposed scope of work as final.


Chapter 173-400 WAC
GENERAL REGULATIONS FOR AIR POLLUTION SOURCES

WAC 173-400-105 Records and reporting.

WAC 173-400-105 Records and reporting. (1) The owner or operator of a stationary source listed in a source category of WAC 173-400-100 shall upon notification by the director, maintain records on the type and quantity of emissions from the source and other information deemed necessary by the director to determine whether the source is in compliance with applicable emission limitations and control measures.

(2) The information recorded pursuant to subsection (1) of this section shall be reported to the department as directed.

(3) When the director determines that recordkeeping and reporting of emission data from any stationary source not listed in WAC 173-400-100 is needed for the investigation or control of air pollution or otherwise necessary to effectuate the purposes of the Washington Clean Air Act (chapter 70.94 RCW), the director shall notify the owner or operator of the source. This notification shall constitute an order to maintain records and submit reports on emissions as set forth in subsections (1) and (2) of this section.

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Chapter 173-403 WAC
IMPLEMENTATION OF REGULATIONS FOR AIR CONTAMINANT SOURCES

WAC
173-403-030 Definitions. Unless a different meaning is clearly required by context, words and phrases used in this chapter and other chapters of Title 173 WAC shall have the following meanings:

(1) "Actual emissions" as of a particular date means the average rate, in weight per unit time, with air pollution controls applied, at which the affected emission unit emitted the pollutant during the two-year period which precedes the particular date, and which is representative of normal operation. An adjustment may be made to the average annual emission rate to account for unusual circumstances during the two-year period. The department or cognizant local authority may allow or require the use of an alternative time period upon a determination that the alternative time period is more representative of normal operation than the immediately-preceding two years. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

The department or cognizant local authority may presume that source-specific allowable emissions, which incorporate limits on hours of operation or production rate, are equivalent to the actual emissions of the unit.

(2) "Adverse impact on visibility" means visibility impairment which interferes with the management, protection, preservation, or enjoyment of the visitor's visual experience of the Federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency, and time of visibility impairments, and how these factors correlate with (a) times of visitor use of the Federal Class I area, and (b) the frequency and timing of natural conditions that reduce visibility. This term does not include effects on integral vistas.

(3) "Air authority" or "cognizant local authority" means an air pollution control authority activated pursuant to chapter 70.94 RCW that has jurisdiction over the subject source.

(4) "Air contaminant" means dust, fumes, mist, smoke, other particulate matter, vapor, gas, odorous substance, or any combination thereof. "Air pollutant" means the same as "air contaminant."

(5) "Air pollution" means the presence in the outdoor atmosphere of one or more air contaminants in sufficient quantities, and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property.

(6) "Allowable emissions" means the emission rate calculated using the maximum rated capacity of the source (unless the source is limited in production rate or hours of operation, or both, by an applicable regulatory order) and the most stringent of (a), (b), or (c) of this subsection. Physical and process limitations must be considered in determining maximum rated capacity.

(a) Standards as set forth in 40 CFR Part 60 and Part 61, if applicable to the source; or

(b) The applicable state implementation plan emission limitation; or

(c) The emission rate specified by an applicable regulatory order.

(7) "Ambient air" means the surrounding outside air.

(8) "Ambient air quality standard" means an established concentration, exposure time, and frequency of occurrence of air contaminant or multiple air contaminants in the ambient air which shall not be exceeded.

(9) "Best available control technology (BACT)" means technology which will result in an emission limitation (including a visible emission standard) based on the maximum degree of reduction for each air pollutant subject to this regulation which would be emitted from any proposed new or modified source which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such sources or modification through application of production processes, available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such air pollutant. In no event shall application of the best available technology result in emissions of any air pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Part 60 and Part 61. If the reviewing agency determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, it may instead prescribe a design, equipment, work practice or operational standard, or combination thereof, to meet the requirement of best available control technology. Such standard shall, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice or operation and shall provide for compliance by means which achieve equivalent results. The requirement of RCW 70.94.152 that a new source will provide "all known available and reasonable methods of emission control" is interpreted to mean the same as best available control technology.

(10) "Best available retrofit technology (BART)" means any emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by source. The emission limitation must be established, on a case-by-case basis, taking into consideration the technology available, the costs of compliance, the energy and nonair quality environmental impacts of compliance, any pollution control equipment in use or in existence at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result
from the use of such technology. If an emission limitation is not feasible, a design, equipment, work practice, operational standard, or combination thereof, may be required. Such standards shall, to the degree possible, set forth the emission reductions achieved and provide for compliance by prescribing appropriate conditions in a regulatory order.

(11) "Bubble" means a set of emission limits which allows an increase in emissions from a given emissions unit or units in exchange for a decrease in emissions from another emissions unit or units, pursuant to RCW 70.94.155.

(12) "Class I area" means any federal, state, or Indian land which is classified or reclassified Class I.

(13) "Commenced construction" means that the owner or operator has all the necessary preconstruction approvals or permits and either has:
   (a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or
   (b) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

(14) "Department" means the Washington state department of ecology.

(15) "Director" means director of the Washington state department of ecology or duly authorized representative.

(16) "Dispersion technique" means a method which attempts to affect the concentration of a pollutant in the ambient air, other than by the use of pollution abatement equipment or integral process pollution controls.

(17) "Emission" means a release of air contaminants into the ambient air.

(18) "Emission reduction credit (ERC)" means a credit granted to a source for a voluntary reduction in actual emissions.

(19) "Emission standard" means a regulation or regulatory order (or portion thereof) setting forth an allowable rate of emissions, level of opacity, or prescribing equipment or operating conditions that result in control of air pollution emission.

(20) "Emissions unit" means any equipment, device, process, or activity that emits to the ambient air, or that may emit to the ambient air, any air contaminant.

(21) "Excess stack height" means that portion of a stack which exceeds the greater of sixty-five meters or the calculated stack height described in WAC 173-403-140(2).

(22) "Fugitive emissions" means emissions which do not pass and which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(23) "Good engineering practice (GEP)" refers to a calculated stack height based on the equation specified in WAC 173-403-140 (2)(a)(ii).

(24) "In operation" means engaged in activity related to the primary design function of the source.

(25) "Integral vista" means a view perceived from within the Class I area of a specific landmark or panorama located outside the boundary of the Class I area.

(26) "Land manager" means the secretary of the federal or head of the state department or Indian governing body with authority over the Class I area.

(27) "Lowest achievable emission rate (LAER)" means for any source that rate of emissions which reflects:
   (a) The most stringent emission limitation which is contained in the implementation plan of any state for such class or category of source, unless the owner or operator of the proposed new or modified source demonstrates that such limitations are not achievable; or
   (b) The most stringent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent.

In no event shall the application of this term permit a proposed new or modified source to emit any pollutant in excess of the amount allowable under applicable new source performance standards.

(28) "Major emissions unit" means any emissions unit which has actual or allowable emissions of one hundred tons per year or more of any pollutant regulated by state or federal law.

(29) "Major modification" means (a), (b), or (c) of this subsection, whichever is the most stringent:
   (a) Any physical change or change in the method of operation of a major source, a source that would become a major source as a result of the proposed change, or a major emissions unit or an emissions unit that would become a major emissions unit as a result of the proposed change that is located in an area that is not in attainment for the pollutant under consideration or is located in an area that is not in attainment for ozone and the pollutant under consideration is volatile organic compounds, which change would cause a net significant emissions increase for any pollutant regulated by state or federal law, except that a net significant emissions increase for any one of the following reasons shall not, in itself, cause the change to be a major modification:
      (i) Use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act; or
      (ii) Use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Clean Air Act; or
      (iii) Use of an alternative fuel or raw material that the source is capable of accommodating and was capable of accommodating prior to December 21, 1976, unless such change in fuel or raw material use is prohibited by a regulatory order; or
      (iv) Use of an alternative fuel at a steam-generating unit to the extent that the fuel is generated from municipal solid waste; or
      (v) An increase in the hours of operation or the production rate unless such increases are prohibited by a regulatory order.
(b) Any physical change or change in the method of
operation of a major source, a source that would become
a major source as a result of the proposed change, or a
major emissions unit or an emissions unit that would be­
come a major emissions unit as a result of the proposed
change that is located in an area that is not in attain­
ment for the pollutant under consideration or is located
in an area that is not in attainment for ozone and the
pollutant under consideration is volatile organic com­
ounds, which change would cause the allowable emis­
sions to be exceeded.

(c) Any reconstruction of a major source, or any re­
construction of a major emissions unit that is located in
an area that is not in attainment for the pollutant under
consideration or located in an area that is not in attain­
ment for ozone and the pollutant under consideration is
volatile organic compounds, for which reconstruction the
fixed capital cost of the new components exceeds fifty
percent of the fixed capital cost of a comparable entirely
new source or emissions unit.

(30) "Major source" means any source which has ac­
tual or allowable emissions of one hundred tons per year
or more of any pollutant regulated by state or federal
law.

(31) "National Emission Standards for Hazardous
Air Pollutants (NESHAPS)" means the federal regula­
tions set forth in 40 CFR Part 61, as promulgated prior
to January 1, 1983.

(32) "Natural conditions" include naturally occurring
phenomena that reduce visibility as measured in terms of
visual range, contrast, or coloration.

(33) "Net emissions increase" means the amount by
which the sum of the following exceeds zero:

(a) Any increase in actual emissions of a pollutant re­sulting from a physical change or change in method of
operation of a specific emission unit in a source; and

(b) Any other increases or decreases in actual emis­sions of the same pollutant from the source that are
contemporaneous with the change: Provided, That

(i) Said other increases or decreases are contemporane­ous with the change only if they occur at the same
time or within one year prior to the change, or if said
decrease(s) has been documented by an emission reduc­tion credit; and

(ii) Said other decreases in emissions are creditable
only to the extent that the old level of actual emissions
or the old level of allowable emissions, whichever is the
lesser, exceeds the new level of allowable emissions; and

(iii) Said other decreases in emissions are not credit­able if the specific emissions unit is a major emissions
unit and is located (A) in an area that is not in attain­
ment for the pollutant or (B) in an area that is not in
attainment for ozone and the pollutant is volatile organic
compounds; and

(iv) The determination of net emissions increase shall
be valid only after a regulatory order has been issued
which establishes that the new emissions from every
emissions unit involved in the determination are equal to
the new allowable emissions expressed as weight of the
pollutant per unit time.

(34) "New source" means a source which commences
construction after the effective date of this chapter. Ad­
dition to, enlargement, modification, replacement, or any
alteration of any process or source which may increase
emissions or ambient air concentrations of any contam­
nant for which federal or state ambient or emission
standards have been established shall be construed as
construction or installation or establishment of a new
source. In addition every major modification shall be
construed as construction or installation or establishment
of a new source.

(35) "New source performance standards (NSPS)"
means the federal regulations set forth in 40 CFR Part
60, as promulgated prior to September 1, 1986.

(36) "Nonattainment area" means a clearly deline­
ated geographic area which has been designated by EPA
promulgation as exceeding a national ambient air quality
standard or standards for one or more of the criteria
pollutants.

(37) "Notice of construction" means a written appli­
cation to permit construction of a new source or modifi­
cation of an existing source.

(38) "Opacity" means the degree to which an object
seen through a plume is obscured, stated as a
percentage.

(39) "Particulate matter" or "particulates" means
small discrete masses of liquid or solid, exclusive of un­
combined water.

(40) "Parts per million (ppm)" means parts of a con­
taminant per million parts of gas, by volume, exclusive
of water or particulates.

(41) "Person" means an individual, firm, public or
private corporation, association, partnership, political
subdivision, municipality, or government agency.

(42) "Prevention of significant deterioration (PSD)"
means the federal regulations set forth in 40 CFR Sub­
part 52.21 as promulgated prior to July 1, 1982, and as
modified by WAC 173-403-080.

(43) "Projected width" means that dimension of a
structure determined from the frontal area of the struc­
ture, projected onto a plane perpendicular to a line be­
tween the center of the stack and the center of the
building.

(44) "Reasonably attributable" means attributable by
visual observation or any other technique the state
deems appropriate.

(45) "Reasonably available control technology
(RACT)" means the lowest emission limit that a partic­
ular source or source category is capable of meeting by
the application of control technology that is reasonably
available considering technological and economic feasi­
bility. RACT is determined on a case-by-case basis for
an individual source or source category taking into ac­
count the impact of the source upon air quality, the
availability of additional controls, the emission reduction
that would be achieved by additional controls, the impact of ad­ditional controls on air quality, and the capital and
operating costs of the additional controls. RACT re­
quirements for any source or source category may be
adopted as an order or regulation after public involve­
mnt per WAC 173-403-110.
(46) "Regulatory order" means an order issued by the department or cognizant local authority to an air contaminant source which approves a notice of construction and/or limits emissions and/or establishes other air pollution control requirements.

(47) "Significant emission" means a rate of emission equal to or greater than any one of the following rates:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Tons/Year</th>
<th>Pounds/Day</th>
<th>Pounds/Hour</th>
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<td>1000</td>
<td>10000</td>
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<td>40</td>
<td>800</td>
<td>8000</td>
</tr>
<tr>
<td>Volatile organic compounds</td>
<td>40</td>
<td>500</td>
<td>5000</td>
</tr>
<tr>
<td>Particulates</td>
<td>25</td>
<td>100</td>
<td>1000</td>
</tr>
<tr>
<td>Lead</td>
<td>6</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Total reduced sulfur (as H₂S)</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total fluoride</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(48) "Significant visibility impairment" means visibility impairment which interferes with the management, protection, preservation, or enjoyment of visitor visual experience of the Class I area. The determination must be made on a case-by-case basis, taking into account the geographic extent, intensity, duration, frequency, and time of the visibility impairment, and how these factors correlate with the time of visitor use of the Class I area and frequency and timing of natural conditions that reduce visibility.

(49) "Source" means all of the emissions unit(s) including quantifiable fugitive emissions, which are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control), whose activities are ancillary to the production of a single product or functionally related group of products.

(50) "Source category" means all sources of the same type or classification.

(51) "Stack" means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct.

(52) "Stack height" means the height of an emission point measured from the ground-level elevation at the base of the stack.

(53) "Standard conditions" means a temperature of 20°C (68°F) and a pressure of 760mm (29.92 inches) of mercury.

(54) "Total reduced sulfur, (TRS)" means hydrogen sulfide, mercaptans, dimethyl sulfide, dimethyl disulfide, and any other organic sulfides present, expressed as hydrogen sulfide.

(55) "Visibility impairment" means any humanly perceptible change in visibility (visual range, contrast, coloration) from that which would have existed under natural conditions.

(56) "Visibility impairment of a Class I areas" means visibility impairment within the area and visibility impairment of any formally designated integral vista associated with the area.

(57) "Volatile organic compound" means a hydrocarbon or derivative of hydrocarbon that has a vapor pressure greater than 0.1 millimeters of mercury at 20°C, except the following excluded compounds: Methane, ethane, trichlorofluoromethane, dichlorodifluoromethane, chlorodifluoromethane, trifluoromethane, trichlorotrifluoroethane, dichlorotetrafluoroethane, chloropentafluoroethane, methylene chloride, and 1,1,1-trichloroethane (methyl chloroform).

Chapter 173-405 WAC
KRAFT PULPING MILLS

WAC 173-405-045 Creditable stack height and dispersion techniques.
WAC 173-405-087 Prevention of significant deterioration (PSD).

Chapter 173-410 WAC
SULFITE PULPING MILLS

WAC 173-410-045 Creditable stack height and dispersion techniques.
WAC 173-410-087 Prevention of significant deterioration (PSD).

Chapter 173-415 WAC
PRIMARY ALUMINUM PLANTS

WAC 173-415-045 Creditable stack height and dispersion techniques.
Chapter 173-415

Title 173 WAC: Ecology, Department of

173-415-051 Prevention of significant deterioration (PSD).

WAC 173-415-045 Creditable stack height and dispersion techniques. The conditions of WAC 173-403-141 and 173-403-145 shall apply to all sources covered by this chapter.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-057 (Order 87-50), § 173-415-045, filed 12/16/87.]

WAC 173-415-051 Prevention of significant deterioration (PSD). The conditions of WAC 173-403-080 shall apply to all new and modified sources covered by this chapter.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-057 (Order 87-50), § 173-415-051, filed 12/16/87.]

Chapter 173-421 WAC

MOTOR VEHICLE EMISSION CONTROL SYSTEMS

(Formerly chapter 18.24 WAC)

WAC

173-421-010 Purpose.

173-421-020 Assumption of jurisdiction and applicability.

173-421-030 Definitions.

173-421-100 Emission control systems.

WAC 173-421-010 Purpose. This chapter promulgated under RCW 70.94.305 and 70.94.331 establishes requirements to preserve emission control equipment installed on motor vehicles.

[Statutory Authority: Chapter 70.94 RCW. 87-19-078 (Order 87-17), § 173-421-010, filed 9/16/87.]

WAC 173-421-020 Assumption of jurisdiction and applicability. The department finds that the prevention and control of air pollution from motor vehicles should be regulated on a state-wide basis and, hereby assumes jurisdiction over motor vehicles for the purpose of controlling air contaminant emissions from the operation of such motor vehicles.

[Statutory Authority: Chapter 70.94 RCW. 87-19-078 (Order 87-17), § 173-421-020, filed 9/16/87.]

WAC 173-421-030 Definitions. Unless a different meaning is clearly required by context, words and phrases used in this chapter shall have the following meanings; general terms common with other chapters of Title 173 WAC as defined in chapter 173-403 WAC, and terms specific to motor vehicle emission control systems as follows:

"Motor vehicle" means a self-powered operating vehicle or one capable of operating, designed to transport people or property, and of a type required to be licensed for operation on public highways.

[Statutory Authority: Chapter 70.94 RCW. 87-19-078 (Order 87-17), § 173-421-030, filed 9/16/87.]

WAC 173-421-100 Emission control systems. A person shall not remove or render inoperable any component or change any element of design of a motor vehicle including adjustments outside the range of manufacturer's specifications that could affect the amount of air contaminants emitted from that vehicle subject to the following conditions:

1) Components of emission control systems may be disassembled and assembled for the purpose of repair and maintenance. These components or elements of design shall be restored to proper working order when they are repaired or maintained.

2) When components of emission control systems require replacement they may be removed and replaced with a part intended by the vehicle manufacturer as a replacement part for that specific vehicle. Under circumstances established by the United States Environmental Protection Agency, an aftermarket replacement part may be used. A replaced part shall be installed and adjusted so that it is in proper working order.

[Statutory Authority: Chapter 70.94 RCW. 87-19-078 (Order 87-17), § 173-421-100, filed 9/16/87.]

Chapter 173-422 WAC

MOTOR VEHICLE EMISSION INSPECTION

WAC

173-422-130 Inspection fees.

WAC 173-422-130 Inspection fees. A fee of nine dollars shall be collected for the first emission test on each vehicle applicable to each vehicle license year. If the vehicle fails, one retest will be provided free of charge at any inspection station operated under contract to the state, provided that the retest is requested within sixty days of the initial test. Any additional retests applicable to the same vehicle license year will require the payment of the same fee charged for the initial test.

Inspection station operators shall forward to the department within ten working days, the amount of fees due to the state for inspections conducted.

The department or its designee shall have the right to audit any inspection station operator's or contractor's records and procedures to substantiate that the operator or contractor is properly collecting and accounting for such fees.

[Statutory Authority: RCW 70.120.040(7). 87-02-051 (Order DE 86-32), § 173-422-130, filed 1/7/87, effective 4/1/87. Statutory Authority: RCW 70.120.120. 87-19-078 (Order DE 81-32), § 173-422-130, filed 12/31/81; 80-03-070 (Order DE 79-35), § 173-422-130, filed 2/28/80.]

Chapter 173-433 WAC

SOLID FUEL BURNING DEVICE STANDARDS

WAC

173-433-010 Purpose.

173-433-020 Applicability.

173-433-030 Definitions.


173-433-110 Opacity standards.

173-433-120 Prohibited fuel types.

173-433-150 Curtailment.

173-433-200 Regulatory actions and penalties.

[1988 WAC Supp—page 566]
WAC 173-433-010 Purpose. This chapter, promul­
gated under chapters 43.21A and 70.94 RCW, estab­
lishes emission standards, certification standards and
procedures, curtailment rules, and fuel restrictions for
solid fuel burning devices.
[Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-056
(Order 87-44), § 173-433-010, filed 12/16/87.]

WAC 173-433-020 Applicability. The provisions of
this chapter apply to solid fuel burning devices in all ar­
eas of the state of Washington.
[Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-056
(Order 87-44), § 173-433-020, filed 12/16/87.]

WAC 173-433-030 Definitions. Unless a different
meaning is clearly required by context, words and
phrases used in this chapter shall have the following
meanings, general terms common with other chapters as
defined in chapter 173-403 WAC, and terms specific to
solid fuel burning devices as defined below:
(1) "Accredited" means a woodstove testing labora­
tory holds a valid certificate of accreditation issued by
the Oregon department of environmental quality.
(2) "Adequate source of heat" means the ability to
maintain seventy degrees Fahrenheit at a point three
feet above the floor in all normally inhabited areas of a
dwelling.
(3) "Catalyst-equipped" means a woodstove with a
catalytic combustor that is an integral component of the
design and manufacture of the woodstove.
(4) "Certified" means that a woodstove meets emission
performance standards when tested by an accred­
itated independent laboratory according to WAC 173–
433–100(7).
(5) "Coalstove" means an enclosed, coal burning ap­
pliance capable of and intended for space heating, do­
mestic water heating, or indoor cooking, which has all of
the following characteristics:
(a) An opening for loading coal which is located near
the top or side of the appliance;
(b) An opening for emptying ash which is located near
the bottom or the side of the appliance;
(c) A system which admits air primarily up and
through the fuel bed;
(d) A grate or other similar device for shaking or dis­
turbing the fuel bed;
(e) Installation instructions which state that the use of
wood in the stove except for coal ignition is prohibited
by law; and
(f) The model is listed by a nationally recognized
safety testing laboratory for use of coal only, except for
coal ignition purposes.
(6) "Cookstove" means an appliance designed with
the primary function of cooking food and containing an
integrally built–in oven, with an internal temperature
indicator and oven rack, around which the fire is vented,
as well as a shaker grate ashpans and an ash cleanout
below the firebox. Any device with a fan or heat chan­
nels used to dissipate heat into the room shall not be
considered a cookstove.
(7) "Consumer" means a person who buys a solid fuel
burning device for personal use.
(8) "Dealer" means a person other than a manufac­
turer or a retailer who is engaged in selling solid fuel
burning devices to retailers or others for resale.
(9) "DEQ" means Oregon department of envi­
ronmental quality.
(10) "EPA" means United States Environmental Pro­
tection Agency.
(11) "Fireplace" means a permanently installed ma­
sory fireplace; or a factory–built solid fuel burning de­
vice designed to be used with an air–to–fuel ratio greater
than or equal to thirty and without features to control
the inlet air–to–fuel ratio other than doors or windows
such as may be incorporated into the fireplace design for
reasons of safety, building code requirements, or
aesthetics.
(12) "Heat output" means the heat output in British
thermal units per hour (Btu/hr) during one run, mea­
sured under test conditions prescribed by WAC 173–
433–100(7).
(13) "Impaired air quality" means a condition de­
clarred by the department or an air authority whenever:
(a) Meteorological conditions are conducive to an accu­
cumulation of air contamination concurrent with:
(i) Total suspended particulate at an ambient level of
one hundred twenty–five micrograms per cubic meter
measured on a twenty–four hour average; or
(ii) Particulate that is ten micron and smaller in di­
ameter (PM10) at an ambient level of ninety micro­
grams per cubic meter measured on a twenty–four hour
average; or
(iii) Carbon monoxide at an ambient level of eight
parts of contaminant per million parts of air by volume
(ppm) measured on an eight–hour average; or
(b) Air quality reaches other limits established by the
department or an air authority.
(14) "Manufacturer" means any person who con­
structs a solid fuel burning device or parts for a solid
fuel burning device.
(15) "New woodstove" means a woodstove that has
not been sold at retail, bargained, exchanged, or given
away for the first time by the manufacturer, the manu­
facturer's dealer or agency, or a retailer, and has not
been so used as to become what is commonly known as
"second hand" within the ordinary meaning of that
term.
(16) "Overall efficiency (%) over the range of heat
outputs tested" means the weighted average combustion
efficiency (%) measured under test conditions (range of
heat outputs) and calculated according to specific pro­
dedures prescribed by WAC 173-433-100(7). This defini­
tion is applicable to the DEQ stack loss emission
measurement methodology. For the calorimeter room
emission measurement method, the weighted average
overall efficiency is the useful heat output released to
the room, divided by the total heat potential of the fuel
consumed.
(17) "Retailer" means any person engaged in the sale
of solid fuel burning devices directly to consumers. A
contractor who sells dwellings with solid fuel burning...
devices installed or a mail order outlet which sells solid fuel burning devices directly to consumers is considered to be a solid fuel burning device retailer.

(18) "Seasoned wood" means wood of any species that has been sufficiently dried so as to contain twenty percent or less moisture by weight.

(19) "Smoke emission rate (grams/hour) over the range of heat outputs tested" means the weighted average particulate emissions (grams per hour) produced by a woodstove tested according to WAC 173-433-100(7).

(20) "Solid fuel burning device" (same as solid fuel heating device) means a device that burns wood, coal, or any other nongaseous or nonliquid fuels, and includes woodstoves, coalstoves, cookstoves, and fireplaces, or any similar device burning any solid fuel used for aesthetic or space-heating purposes in a private residence or commercial establishment, which has a heat input less than one million British thermal units per hour.

(21) "Treated wood" means wood of any species that has been chemically impregnated, painted, or similarly modified to improve resistance to insects or weathering.

(22) "Weighted average" means the final result of the several woodstove emission tests at different burning rates is calculated from a statistically derived distribution of home heating needs, rather than a simple average of the test runs. (Refer to WAC 173-433-100(7).)

(23) "Woodstove" means a wood fueled appliance other than a cookstove with a closed fire chamber which maintains an air-to-fuel ratio of less than thirty during the burning of ninety percent or more of the fuel mass consumed at the minimum burn rate achievable. Any combination of parts, typically consisting of but not limited to, doors, legs, flue pipe collars, brackets, bolts and other hardware, when manufactured for the purpose of being assembled, with or without additional owner supplied parts, into a woodstove, is considered a woodstove.

WAC 173-433-100 Emission performance standards. (1) Requirements for sale of new woodstoves in Washington. After July 1, 1988, a person shall not advertise to sell, offer to sell, sell, bargain, exchange, or give away a new woodstove in Washington unless it has been:

(a) Tested to determine its emission performance and heating efficiency in accordance with criteria and procedures specified in subsection (7) of this section; certified by the DEQ in accordance with subsection (7) of this section; and labeled for emission performance and heating efficiency as specified in subsection (10) of this section; or

(b) Tested to determine its emission performance and heating efficiency in accordance with criteria and procedures specified by the EPA in 40 CFR 60 Subpart AAA – Standards of Performance for Residential Wood Heaters; certified by the EPA under test conditions no less stringent than those imposed under subsection (7) of this section; and labeled for emission performance and heating efficiency as specified in 40 CFR 60 Subpart AAA – Standards of Performance for Residential Wood Heaters.

(2) Exemptions.

(a) Any solid fuel burning device not defined herein as a woodstove.

(b) Solid fuel burning devices that are not suitable for use as heating equipment in or in connection with residences or commercial installations, such as portable camping stoves, are excluded from this section.

(c) Wood-fired forced air furnaces that primarily heat living space or water through indirect heat transfer using forced air or pressurized water systems are excluded from this section.

(3) General certification procedures. A solid fuel burning device that is exempt and therefore not eligible for certification under DEQ or EPA regulations may be tested to demonstrate its emission performance in accordance with criteria and procedures no less stringent than those imposed under WAC 173-433-100(7), subject to the following conditions:

(a) All criteria and procedures shall be submitted by the applicant for review and approval by the department prior to certification testing;

(b) Certification of the solid fuel burning device shall be granted by the department upon approval of test results that demonstrate that the solid fuel burning device meets emission performance standards equivalent to those under WAC 173-433-100(6).

(4) State-wide emission performance standards. An air authority shall not adopt or enforce emission performance standards for solid fuel burning devices that are more stringent than the state-wide standard.

(5) Label alteration. A manufacturer, dealer, or retailer shall not alter either the permanent or removable label in any way from the label approved by the DEQ.


(a) A new woodstove with minimum heat output of less than forty thousand Btu/hr advertised for sale, offered for sale, or sold in Washington after July 1, 1988, shall not exceed nine grams per hour for a noncatalytic woodstove or four grams per hour for a catalytic woodstove as weighted average particulate emission standard when tested and measured according to subsection (7) of this section.

(b) New woodstoves with minimum heat output equal to or greater than forty thousand Btu/hr advertised for sale, offered for sale, or sold in Washington after July 1, 1988, shall not exceed an average particulate emission standard equal to the sum of 8.0 grams per hour plus 0.2 grams per hour for each thousand Btu/hr heat output when tested and measured according to subsection (7) of this section.

(7) Testing criteria and procedures.

(a) To be considered eligible for certification a woodstove must be tested in strict compliance with criteria and procedures contained in the document Oregon Department of Environmental Quality Standard Method for Measuring the Emissions and Efficiencies of Residential Woodstoves dated June 8, 1984, and herein incorporated by reference and on file at the department.
(b) All testing for certification purposes shall be conducted by a stove testing laboratory accredited by the DEQ.

(8) Changes in woodstove design. The certification of a woodstove shall be valid for only the specific model, design, plans and specifications that were originally submitted, tested and approved for certification.

(9) Woodstove alteration. A manufacturer, dealer, or retailer shall not remove or render inoperable any devices or components of any systems installed by the manufacturer of a woodstove for the purpose of controlling air contaminant emissions, other than for replacement or routine maintenance.

(10) Labeling requirements. Woodstoves required to be labeled pursuant to subsection (1) of this section shall have affixed to them:

(a) A permanent label previously approved by the DEQ as to form, content, and location, that shows the test emissions and heating efficiency for the range of heat outputs tested; and

(b) A point-of-sale removable label that verifies certification and shows how that model woodstove emission test results compare with the emission performance standard; and shows the heating efficiency and heat output range of the appliance. The label shall be affixed to the woodstove at the point-of-sale near the front and top of the stove and remain affixed until sold and delivered to the consumer; or

(c) Labeling required by the EPA under 40 CFR 60 Subpart AAA – Standards of Performance for Residential Wood Heaters.

(11) Permanent label.

(a) The permanent label shall contain the following information:

(i) Testing laboratory;

(ii) Date tested;

(iii) Test procedure used;

(iv) Manufacturer of woodstove;

(v) Model;

(vi) Design number;

(vii) The statement: "Performance may vary from test values depending upon actual home operating conditions";

(viii) A graph showing particulate emission rates, in grams per hour and overall efficiency over the range of heat outputs tested;

(ix) The axes of the graph shall be identified as follows: Vertical axis, left side: "Smoke – grams/hour," with a scale of zero to a maximum of twenty, bottom to top; vertical axis, right side: "Efficiency – %," with a scale of a minimum of fifty to a maximum of ninety, bottom to top; horizontal axis, bottom: "Heat Output – Btu/hour," with a scale from zero to a maximum of five thousand Btu/hour higher than the highest tested heat output;

(x) Curves describing emissions and efficiency at various heat outputs shall be printed on the graph as developed by the DEQ.

(b) The label shall be made of metal, and of a thickness sufficient to insure permanence of the label. The label shall be permanently attached to the woodstove such that it is readily visible after installation, and of such a design that it cannot be removed from the woodstove without damage to the label. The label shall be located on any visible exterior surface except that the label shall not be located on the bottom of the woodstove or any interior surface, compartment, or under overlapping covers or doors, or at another interior location. The label shall remain legible for the maximum expected useful life of the woodstove in normal operation.

(c) The permanent label may be combined with another label, such as a safety label, if the design and integrity of the permanent label is not compromised, and when the combination label has been approved by the DEQ.

(12) Removable label.

(a) The point-of-sale removable label, or "Emissions and Efficiency Performance" label, shall contain the following information:

(i) "Smoke (Ave.) ------------ grams/hour," weighted average of tested values.

(ii) "Efficiency (Ave.) ------------ %," weighted average of tested values.

(iii) Summary of the applicable emissions standard.

(iv) Heat output range, tested values.

(v) Manufacturer of woodstove.

(vi) Model of woodstove.

(vii) Design number of model.

(viii) A statement verifying certification.

(ix) The statement "Performance may vary from test values depending upon actual home operating conditions."

(b) The label shall be visibly located on the woodstove when the woodstove is available for inspection by consumers.

(c) This label may not be combined with any other label or with other information.

(d) The label shall be attached to the woodstove in such a way that it can be easily removed by the consumer upon purchase.

[Statutory Authority: Chapters 70.94 and 43.21A RCW. 88-01-056 (Order 87-44), § 173-433-100, filed 12/16/87.]

WAC 173-433-110 Opacity standards. (1) Phase 1 opacity level. A person shall not cause or allow emission of a smoke plume from any solid fuel burning device to exceed an average of forty percent opacity for six consecutive minutes in any one–hour period.

(2) Phase 2 opacity level. After July 1, 1990, a person shall not cause or allow emission of a smoke plume from any solid fuel burning device to exceed an average of twenty percent opacity for six consecutive minutes in any one–hour period.

(3) State–wide opacity standard. An air authority shall not adopt or enforce an opacity level for solid fuel burning devices that is more stringent than the state–wide standard.

(4) Test method and procedures. EPA reference method 9 – Visual Determination of the Opacity of Emissions from Stationary Sources shall be used to determine compliance with subsections (1) and (2) of this section.
WAC 173-433-120 Prohibited fuel types. A person shall not cause or allow any of the following materials to be burned in a solid fuel burning device:

1. Garbage;
2. Treated wood;
3. Plastic products;
4. Rubber products;
5. Animals;
6. Asphaltic products;
7. Waste petroleum products;
8. Paints; or
9. Any substance, other than properly seasoned fuel wood, or coal with sulfur content less than 1.0% by weight burned in a coal stove, which normally emits dense smoke or obnoxious odors.

WAC 173-433-150 Curtailment. (1) A person in a residence or commercial establishment with an adequate source of heat other than the burning of solid fuel shall not burn solid fuel in any solid fuel burning device:

(a) Whenever the department has declared an air pollution episode for the geographical area pursuant to chapter 173-435 WAC; or

(b) Whenever the department or an air authority has declared impaired air quality for the geographical area, except when the solid fuel burning device is certified under WAC 173-433-100.

(2) A person responsible for a solid fuel burning device already in operation at the time an episode is declared shall extinguish that device by withholding new solid fuel for the duration of the episode. A person responsible for a solid fuel burning device that is not certified under WAC 173-433-100 already in operation at the time impaired air quality is declared shall extinguish that device by withholding new solid fuel for the duration of the impaired air quality. Smoke visible from a chimney, flue or exhaust duct after a time period of three hours has elapsed from the time of declaration of the episode or impaired air quality.

WAC 173-434-010 Purpose. This chapter establishes emissions standards, design requirements, and performance standards for solid waste incinerator facilities.

WAC 173-434-020 Applicability. The provisions of this chapter shall apply state-wide to all solid waste incinerator facilities constructed after January 1, 1985, which burn or are designed to burn twelve or more tons per day of solid waste or solid waste derived fuel, and facilities constructed prior to January 1, 1985 that commence incineration of twelve or more tons per day of solid waste or solid waste derived fuel after January 1, 1985.

WAC 173-434-030 Definitions. Unless a different meaning is clearly required by context, words and phrases used in this chapter shall have the following meanings, general terms common with other chapters as defined in chapter 173-403 WAC, and terms specific to solid waste incinerators as defined below.

(1) "Facility" means all of the emissions unit(s) including quantifiable fugitive emissions, which are located in one or more contiguous or adjacent properties, and are under the control of the same person (or persons...
under common control), whose activities are ancillary to the incineration of solid waste.

(2) "Residence time" means the minimum amount of time that a parcel of gas is subject to a given temperature.

(3) "Solid waste" means all putrescible and nonputrescible solid and semisolid wastes, including but not limited to garbage, rubbish, ashes, industrial wastes, swill, demolition and construction wastes, abandoned vehicles or parts thereof, and discarded commodities. This includes all liquid, solid and semisolid materials, which are not primary products of public, private, industrial, commercial, mining, and agricultural operations. Solid waste includes but is not limited to septic tanks, dangerous waste, and problem wastes. Solid waste does not include wood waste or sludge from waste water treatment plants.

(4) "Transmissometer" means a device that measures opacity and conforms to EPA Performance Specifications Number 1 in Title 40 Code of Federal Regulations, Part 60, Appendix B as promulgated prior to December 1, 1986.

WAC 173-434-050 New source review. (1) Notice of construction. Construction shall not commence on any new source until a notice of construction has been approved by the department or cognizant local authority pursuant to WAC 173-403-050. The owner or operator of any source shall notify the department or cognizant local authority prior to replacement of air pollution control equipment or process equipment other than replacement for routine maintenance and repair. The department or cognizant local authority may determine that a notice of construction is required.

(2) Operation and maintenance plan. As part of a condition of approval of the notice of construction, before initial start up the owner or operator of the incinerator shall develop a plan for the operation and maintenance of all equipment and procedures that can cause or control air pollution. Every twenty-four months thereafter, the owner or operator must obtain approval of a new or updated plan. The owner or operator must obtain the department's or cognizant local authority's approval of the plan prior to commencing operation and shall not incinerate solid waste without an approved plan. The plan may include operating parameters, maintenance procedures and operation personnel training requirements and procedures.

WAC 173-434-100 Requirement for BACT. (1) No incinerator facility shall cause or permit air contaminant emissions in excess of the limits described in this section, as modified by chapter 173-403 WAC if applicable. Further, all solid waste incinerator facilities that are required to file a notice of construction are required to use best available control technology (BACT) as defined at the time of construction which may be determined for some facilities to be more stringent than the emissions limitations of this chapter and may include fuel cleaning or separation.

(2) Whenever more than one regulation applies to the control of air contaminants from a solid waste incineration facility the more stringent regulation, control, or emission limit shall govern.

WAC 173-434-110 Adoption of federal standards of performance. Title 40, Code of Federal Regulations Part 60, Subparts A and E and Appendixes A, B, C, and D with the exception of Sections 60.5 (determination of construction or modification) and 60.6 (review of plans) as promulgated prior to December 1, 1986, is by this reference adopted and incorporated herein. For the purpose of state administration of the federal regulations adopted by reference hereby, the term "administrator" as used therein shall refer to the director of the department of ecology.


(2) The department or cognizant local authority, at any time after the effective date of this section, may conduct or require source tests and require access to: Records, books, files, and other information specific to the control, recovery, or release of asbestos, beryllium, mercury, or vinyl chloride in order to determine the status of compliance of sources of these contaminants and to carry out its enforcement responsibilities. Source testing, monitoring, and analytical methods for sources of the above named contaminants shall conform with the requirements of NESHAPS.

(3) This section shall not apply to any source operating pursuant to a waiver granted by the United States Environmental Protection Agency or an exemption granted by the president of the United States during the effective life of such waiver or exemption.

WAC 173-434-130 Emission standards. (1) Particulate.

(a) For incinerator facilities that have the capability of burning two hundred fifty or more tons of solid waste per day, the particulate emissions from each incinerator stack shall not exceed 0.046 grams of particulate per dry cubic meter at standards conditions (0.020 grains/dscf) corrected to seven percent oxygen for an hourly average.

(b) For incinerator facilities that have a maximum capability of burning less than two hundred fifty tons of solid waste per day, the particulate emissions from each facility...
incinerator stack shall not exceed 0.069 grams of particulate per dry cubic meter at standards conditions (0.030 grains/dscf) corrected to seven percent oxygen for an hourly average.

(2) Hydrogen chloride. The hydrogen chloride emissions from each incinerator stack shall not exceed fifty ppm corrected to seven percent oxygen for an hourly average, except if the owner or operator demonstrates that the uncontrolled emissions of hydrogen chloride are reduced by at least eighty percent and a procedure acceptable to the department or cognizant local agency for monitoring is developed.

(3) Sulfur dioxide. The sulfur dioxide emissions from each incinerator stack shall not exceed fifty ppm corrected to seven percent oxygen for an hourly average, except if the owner or operator demonstrates that the uncontrolled emissions of sulfur dioxide are reduced by at least eighty percent and a procedure acceptable to the department or cognizant local agency for monitoring is developed. When more than fifty percent of the heat input is fossil fuel the department or cognizant local authority may establish a higher sulfur dioxide limit provided that limit meets the requirements of best available control technology.

(4) Opacity.

(a) The opacity as measured visually from any incinerator stack shall not exceed an average of five percent opacity for more than six consecutive minutes in any sixty minute period.

(b) The opacity as measured by a transmissometer shall not exceed an average of ten percent opacity for more than six consecutive minutes in any sixty minute period.

(c) The opacity as measured visually shall not exceed an average of zero percent from any emission unit except incinerator stacks for more than six consecutive minutes in any sixty minute period.

(5) Odors. Any person who shall cause or allow the generation of any odor from any source which may unreasonably interfere with any other property owner's use and enjoyment of his property shall use recognized good practices and procedures to reduce those odors to a reasonable minimum.

(6) Fugitive emissions. Each incinerator operator or owner shall take reasonable precautions to prevent fugitive emissions which includes the paving of all normally traveled roadways within the plant boundary and enclosing or hoooding material transfer points.

(7) Masking. No incinerator operator shall cause or permit the installation or use of any device, or the use of any means which, without resulting in a reduction in the total amount of air contaminant emitted, conceals an emissions of an air contaminant which would otherwise violate any provision of this chapter.

(8) Fallout. No incinerator owner or operator shall cause or permit the emission of particulate matter from any emissions unit which becomes deposited beyond the property boundary under direct control of the owner or operator of the incinerator facility in such quantities or of such character or duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or will interfere unreasonably with the use and enjoyment of the property upon which the material is deposited.

(9) Other contaminants. No incinerator owner or operator shall cause or permit air contaminants or water droplets including an air contaminant whose emissions are not otherwise prohibited by this chapter, in such quantities or of such characteristics or duration as is, or is likely to be, injurious to human health, plant or animal life or property, or which unreasonably interferes with use or enjoyment of property, or may cause a public safety hazard.

(10) Source testing. In order to demonstrate compliance with this chapter, the department or cognizant local authority may require that a test be made of any emissions unit using procedures contained in Source Test Manual – Procedures for Compliance Testing, state of Washington, department of ecology, on file at the department. The operator of a source shall be required to provide the necessary platform and sampling ports for the department or cognizant local authority personnel to perform a test of an emissions unit. The department or cognizant local authority shall be allowed to obtain a sample from any emissions unit. The operator shall be given an opportunity to observe the sampling and to obtain a sample at the same time.

[Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-130, filed 3/16/87.]

WAC 173-434-160 Design and operation. (1) Combustion temperature. Whenever solid waste is being burned the temperature of the final combustion zone shall not be below 982°C (1800°F) for a fifteen minute average. At no time when solid waste is being burned shall the temperature of the final combustion zone fall below 871°C (1600°F).

(2) Residence time. The minimum combustion chamber temperature must be maintained for at least one second (1.0 second) in a zone after the last over fire air has entered the combustion chamber. Procedures for determining the residence time shall be a part of the new source review.

(3) Excess air. The combustion gases leaving the final combustion zone must contain at least three percent free oxygen measured on a wet basis.

(4) Combustion air. To minimize odor and fugitive emissions and to maintain a negative pressure in the tipping area, the combustion air shall be withdrawn from the tipping area, or shall utilize an equivalent means of odor and fugitive emission control acceptable to the department or cognizant local authority.

(5) Combustion air distribution and control. The air distribution shall be fully controllable at each location where pressurized air is introduced and the air flow shall be measured and monitored continuously.

(6) Particulate control device temperature. The average inlet temperature of the primary (most efficient) particulate control device shall not exceed 177°C (350° F) whenever solid waste is being burned.
WAC 173-434-170 Monitoring and reporting. The owners or operators of each incinerator shall conduct routine monitoring of emissions in accordance with a program that has been approved by the department or cognizant local authority. The program must contain quality control and quality assurance procedures.

(1) Monitoring. As part of the program the owners or operators shall install, operate, and maintain continuous monitors for the following:

(a) Opacity;
(b) Combustion temperature;
(c) Particulate control device temperature;
(d) Hydrogen chloride and/or sulfur dioxide;
(e) Oxygen;
(f) Carbon monoxide;
(g) Combustion air distribution;
(h) Pollution control equipment bypass conditions.

The monitors for opacity, sulfur dioxide, carbon monoxide, and oxygen shall comply with EPA performance specifications in Title 40, Code of Federal Regulations, Part 60, Appendix B as promulgated prior to December 1, 1986.

(2) Reporting. Results of the monitoring shall be reported within thirty days of the end of each calendar month and shall include but may not be limited to data such as:

(a) The average daily maximum concentration of each monitored pollutant and the daily amount of solid waste burned.
(b) The date, time, and magnitude of any periods during which the standards were exceeded, and what corrective action was or will be taken.
(c) Any period of monitor down time.

(3) Testing. The owners or operators shall conduct emission tests for particulate, sulfur dioxide and hydrogen chloride on a regular basis. These tests may be used to help determine acceptable operating parameters. The testing shall be at least annual for facilities capable of burning two hundred fifty tons or more of solid waste per day and biennial for other facilities.

(4) Other data. Each owner or operator shall furnish upon request of the department or cognizant local authority, such other pertinent data as the department or cognizant local authority may require to evaluate the incinerator’s emissions or emissions control program.

[Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-170, filed 3/16/87.]

WAC 173-434-190 Changes in operation. If a startup, shutdown, breakdown, or upset condition occurs which could result in an emissions violation or a violation of an ambient air quality standard, the owner or operator of the source shall take the following actions as applicable:

(1) For a planned condition, such as a startup or shutdown, the condition shall be reported to the department or cognizant local authority at least twenty-four hours in advance of its occurrence. For facilities that normally operate for less than twenty-four hours per day, this provision may be waived provided that daily startup and shutdown procedures are developed that are acceptable to the department or cognizant local authority.

(2) For unplanned conditions, such as a breakdown or upset, the condition shall be reported to the department or cognizant local authority as soon as possible, no later than the end of the next business day.

If, upon reviewing the available information, the department or cognizant local authority determines that continued operation of any emission unit is likely to cause a significant risk to the public it may order an immediate shutdown of the emissions unit.

Upon request of the department or cognizant local authority the owner or operator of the source shall submit a full written report including known causes of the infraction, the corrective actions taken, and the preventive measures to be taken to minimize or eliminate the chance of recurrence.

Compliance with the requirement of WAC 173-434-100, does not relieve the owner or operator of the source from the responsibility to maintain continuous compliance with all the requirements of chapter 173-434 WAC nor from the resulting liabilities for failure to comply.

[Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-190, filed 3/16/87.]

WAC 173-434-200 Emission inventory. The owner or operator of any solid waste incinerator shall submit an inventory of emissions from the sources each year upon and according to instructions from the department of ecology. The inventory shall include but may not be limited to stack and fugitive emissions of particulates, sulfur dioxide, nitrogen oxides, carbon monoxide, volatile organic compounds, hydrogen chloride, and other contaminants, and shall be submitted when required. The inventory shall include total emissions of each pollutant for the year in tons per year and an estimate of the total emitted each quarter. An estimate shall be made of the one hour and twenty-four hour emissions while operating at capacity. The report shall include the average sulfur content of any fossil fuel used which will result in emissions of more than twenty-four tons per year of sulfur dioxide.

[Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-200, filed 3/16/87.]
WAC 173-434-210 Special studies. The department or cognizant local authority may require such additional special studies relevant to process emissions and establish completion dates as it determines necessary. These special studies may include the requirement to conduct studies of dioxin emissions and control measures.

[Statutory Authority: Chapter 70.94 RCW. 87-07-041 (Order 86-38), § 173-434-210, filed 3/16/87.]

Chapter 173-440 WAC

SENSITIVE AREAS
(Formerly chapter 18-06 WAC)

WAC
173-440-010 Purpose.
173-440-020 Applicability.
173-440-030 Definitions.
173-440-040 Sensitive areas designated.
173-440-100 Standards.
173-440-900 Appendix A—Map.

WAC 173-440-010 Purpose. This chapter promulgated under RCW 70.94.305 and 70.94.331 designates certain geographical areas of the state as sensitive areas after considering population, development and recreational and scenic values; and provides for the imposition of more stringent standards and compliance requirements for certain stationary source categories within these areas than apply to such categories outside sensitive areas.

[Statutory Authority: Chapter 70.94 RCW. 87-19-076 (Order 87-15), § 173-440-010, filed 9/16/87.]

WAC 173-440-020 Applicability. The provisions of this chapter shall apply to all sources of a listed source category located in a sensitive area.

[Statutory Authority: Chapter 70.94 RCW. 87-19-076 (Order 87-15), § 173-440-020, filed 9/16/87.]

WAC 173-440-030 Definitions. Unless a different meaning is clearly required by context, words and phrases used in this chapter shall have the following meanings: General terms common with other chapters of Title 173 WAC as defined in chapter 173-403 WAC, and terms specific to sensitive areas as follows: "Sensitive area" means a geographical area designated by this chapter.

[Statutory Authority: Chapter 70.94 RCW. 87-19-076 (Order 87-15), § 173-440-030, filed 9/16/87.]

WAC 173-440-040 Sensitive areas designated. Designated as sensitive areas in the state are:

(1) All cities with a population of 1,000 or more that are not located in a county having an air authority, together with those lands within a zone extending one mile (horizontal measure) from the present city limits. These cities are presently:
   (a) Pullman
   (b) Wenatchee
   (c) Ellensburg
   (d) Clarkston
   (e) Othello
   (f) Omak
   (g) Colville
   (h) Colfax
   (i) Dayton
   (j) Goldendale
   (k) Chelan
   (l) Okanogan
   (m) Cashmere
   (n) Ritzville
   (o) Pomeroy
   (p) Cle Elum
   (q) White Salmon
   (r) Oroville
   (s) Newport
   (t) Coulee Dam
   (u) Davenport
   (v) Chewelah
   (w) Leavenworth
   (x) Brewster
   (y) Wilbur
   (z) Odessa

(2) Those sections of state highways designated on the map incorporated herein as Appendix A (WAC 173-440-900), together with those lands within a zone extending one mile (horizontal measure) to either side of the highway right of way and all incorporated cities or towns bordering the designated sections of highway.

(3) Any area on either side of the Columbia, Snake, or Spokane Rivers within a zone extending one mile (horizontal measure) from the line of mean high water.

[Statutory Authority: Chapter 70.94 RCW. 87-19-076 (Order 87-15), § 173-440-040, filed 9/16/87.]

WAC 173-440-100 Standards. In addition to all other applicable regulations the following more restrictive standards shall apply in sensitive areas for stationary sources in the categories listed.

Wigwam burners. All wigwam burners shall comply with the requirements of WAC 173-400-070 (1)(d).

[Statutory Authority: Chapter 70.94 RCW. 87-19-076 (Order 87-15), § 173-440-100, filed 9/16/87.]
Chapter 173-450 WAC

Establishing Requirements for the Receipt of Financial Aid
(Formerly chapter 18-20 WAC)

WAC 173-450-010 Purpose and applicability. These rules and regulations are promulgated under RCW 70.94.143, 70.94.305, and 70.94.385 of the Washington Clean Air Act to establish standard of eligibility for the granting of state and federal financial aid to air authorities.

WAC 173-450-020 Definitions. Unless a different meaning is clearly required by context, words and phrases used in this chapter shall have the following meanings; general terms common with other chapters of Title 173 WAC as defined in chapter 173-403 WAC, and terms specific to requirements for financial aid as follows:

1. "Applicant" means an air authority applying for state financial aid under the provisions of chapter 70.94 RCW.
2. "Grantee" means an applicant for whom state financial aid has been approved by the department.
3. "Locally funded portion" or "local funds" means the funds provided to the applicant air authority from the

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sources available to it under chapter 70.94 RCW exclusive of state financial aid or federal funds designated specifically for air pollution.

(4) "Payment period" means the period of time for which money for state and federal financial aid is paid to the grantee upon receipt and approval by the department of a properly executed voucher.

(5) "Workable program" means a comprehensive statement of objectives for the prevention and control of air pollution and the existing and proposed measures to achieve these objectives as described in WAC 173-450-050.

[Statutory Authority: Chapter 70.94 RCW. 87-19-077 (Order 87-16), § 173-450-020, filed 9/16/87.]

WAC 173-450-030 Limitations. State financial aid shall be granted to air authorities qualifying under these regulations subject to the following limitations:

(1) State financial aid shall not exceed an amount equal to fifty percent of the locally funded portion of the annual recurring expenditures of such authority in each of the first three years during which state financial aid is utilized by the air authority and shall not exceed an amount equal to one hundred percent of the locally funded portion in each following year.

(2) The department may limit the amount of financial aid available to a grantee when it becomes necessary due to the lack of sufficient funds available for distribution to meet the needs of all qualified grantees throughout the state.

(3) The department may limit the amount of financial aid to less than the amount for which the applicant applies when the department determines that proposed items of expenditure are not consistent with air pollution control program needs in the applicant's area of jurisdiction, or are not in the best interests of a coordinated state-wide air pollution control program, or where such items of expenditure duplicate the responsibilities and activities of the department.

[Statutory Authority: Chapter 70.94 RCW. 87-19-077 (Order 87-16), § 173-450-030, filed 9/16/87.]

WAC 173-450-040 Applications. Applications for state financial aid shall be prepared and submitted on forms specified by the department under the following conditions:

(1) Applications shall be filed with the department and the department shall take action as to the disposition of an application within sixty-five days of its first presentation. Applications shall be approved, denied, or deferred: Provided, That where action is deferred the applicant shall be advised of the reasons for such deferral and action shall be taken within a reasonable time.

(2) Applications must contain a statement of need for air pollution prevention and control in the applicant's jurisdiction.

(3) The applicant must describe a workable program and its objectives together with a proposed timetable of accomplishment.

(4) The application shall contain the budget of the air authority showing all anticipated revenue and sources of revenue, including requested state financial aid, and shall show proposed expenditures covering salaries, equipment and accessories, expendable supplies, travel, and such other information as may be deemed necessary by the department.

(5) Any air pollution control activity conducted by the applicant air authority during the twelve-month period immediately prior to the proposed grant period shall be described in the application, including funds budgeted and expended.

(6) It shall be the policy of the department in reviewing applications for state financial aid and in administering such financial aid to take into consideration the following factors:

(a) The implementation of coordinated state-wide air pollution prevention and control.

(b) The responsibilities of the department with respect to its jurisdiction over any areas or type of air contaminant sources and for monitoring the movement of air contaminants throughout the state.

(c) The needs and financial capability of the air authorities in the various areas of the state and the relative effectiveness of the air authorities.

(d) The capability and reasonable potential of the air authorities to perform.

(7) The department will, from time to time, determine or estimate the amount of state financial aid that will be available and advise the applicants, or potential applicants, as to the availability of such aid or supplemental aid.

[Statutory Authority: Chapter 70.94 RCW. 87-19-077 (Order 87-16), § 173-450-040, filed 9/16/87.]

WAC 173-450-050 Workable program. The applicant shall provide sufficient information to show that its workable program is designed to provide for effective prevention and control of air pollution through an orderly progression of development, establishment, and improvement of air pollution control programs.

(1) The initial activity of an applicant shall be the development of a plan designed to provide an evaluation of existing and potential air pollution within the jurisdiction of the applicant, including a general inventory of the types of air contaminant sources and their relative contribution to the air pollution problem; to provide for the initiation of air quality surveillance appropriate to the air contaminant sources over which the applicant will have jurisdiction; and to provide for the development of regulations appropriate to the existing air contaminant sources or those which may be reasonably anticipated.

(2) The establishment and improvement of air pollution control programs which constitute the operating control activity of an applicant, shall be oriented to achieving compliance with requirements and regulations of the applicant with respect to air contaminant sources under its jurisdiction.

(3) Sampling and monitoring programs shall be oriented to surveillance for control purposes with respect to...
those air contaminant sources under the applicant’s jurisdiction, except as may be requested by the department to supplement the state-wide monitoring program.

(4) Budget for personnel, equipment and other operating expenses must be adequate to carry out the program during the grant period for which state financial aid is requested. Total funding from all sources shall provide, as a minimum, for the equivalent of one full time person: Provided, That the department may approve the sharing of personnel with another agency, the utilization of part-time staff, or persons under contract when these methods can be demonstrated as an effective means of carrying out the program and the purposes of the Washington Clean Air Act.

(5) The locally funded portion of the annual operating cost, budgeted and expended in any grant period for which application is made for state financial aid, shall not be less than the locally funded annual expenditure for air pollution control during the twelve-months period immediately preceding the proposed grant period, unless it can be demonstrated by the applicant that there were necessary nonrecurring expenditures in the previous period or that the program objectives and the purposes of the Washington Clean Air Act can reasonably be met with a reduced expenditure.

[Statutory Authority: Chapter 70.94 RCW. 87-19-077 (Order 87-16), § 173-450-050, filed 9/16/87.]

WAC 173-450-060 Grant conditions. (1) No grant of state funds shall be made to any grantee for a period in excess of twelve months.

(2) Any state financial aid granted shall be used solely for carrying out the program outlined in the approved application or approved amendment as provided in WAC 173-450-040 and 173-450-080.

(3) The grantee shall provide for and maintain such accounting, budgetary, and other fiscal procedures so as to assure the proper and efficient administration of funds. The fiscal records shall be such as to reflect currently the receipt and disposition of all funds including state financial aid. Such records and documents pertinent to the receipt and disposition of funds shall be kept available for review and audit.

(4) As a minimum the grantee shall submit quarterly financial and progress reports to the department.

[Statutory Authority: Chapter 70.94 RCW. 87-19-077 (Order 87-16), § 173-450-060, filed 9/16/87.]

WAC 173-450-070 Payments. (1) Grantees shall initiate requests for payment of state financial aid for the appropriate payment period utilizing properly executed vouchers furnished by the department. The voucher shall state the requested amount of state financial aid and the expenditure of local funds during the payment period. Local funds expended for any item may be shown as the appropriate portion of the total expenditure when the expenditure properly includes the use of, or anticipates, reimbursement with federal or state grant funds.

(2) Upon approval of the voucher by the department, payment for the appropriate payment period shall be authorized.

(3) Payments of state and federal financial aid shall be made by way of reimbursement as contained in the annual agreement payment schedule or otherwise mutually agreed upon, and changed by an amendment to the annual agreement. All expenditures claimed for reimbursement shall be subject to audit.

(4) Final payment of state and federal financial aid shall be based upon approved vouchers applied to the entire grant period.

(5) Vouchers for the final payment period during a grant period shall be submitted by the grantee by the 15th day of July of that year.

(6) The department may withhold approval of the vouchers submitted by the grantee if it finds that said grantee has failed to comply with any of the grant conditions or any other requirement or condition imposed by these regulations or chapter 70.94 RCW, for a period not to exceed thirty days. If at the end of such period the matter has not been resolved and the department has not approved said vouchers, the grantee may request an administrative hearing before the department.

[Statutory Authority: Chapter 70.94 RCW. 87-19-077 (Order 87-16), § 173-450-070, filed 9/16/87.]

WAC 173-450-080 Changes, amendments and supplemental state financial aid. (1) Changes in the workable program of a grantee during the grant period which would not substantially affect the workable program, nor increase the total cost to the state, and which are for the purpose of improving the operation and performance of the workable plan, may be made: Provided, That written approval in advance is obtained from the department.

(2) Changes in the workable program of a grantee during the grant period which would significantly alter the workable program shall not be made until the grantee has submitted to, and the department has approved, an amendment to the original application.

(3) Application for supplemental state and federal financial aid may be made by the grantee when notice is given by the department that such supplemental funds have become available. The application shall be made as an amendment to the previously approved workable program of the grantee and shall include proposed additions in or improvements to the workable program and proposed changes in the budget including the additional local funds to be provided. The department may approve additional financial aid to the extent such funds become available having considered the needs of all grantees throughout the state.

[Statutory Authority: Chapter 70.94 RCW. 87-19-077 (Order 87-16), § 173-450-080, filed 9/16/87.]

WAC 173-450-090 Termination. The department may terminate state and federal financial aid, in whole or in part, to any grantee when it finds, after reasonable notice and opportunity for appeal to the director, that the grantee has failed to comply with any of the conditions of the approved application or amendments thereto.

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or any of the requirements or conditions imposed by or pursuant to these regulations or the Washington Clean Air Act.

Upon the effective date of termination, the grantee shall promptly render an accounting and final statement of contractual obligations properly incurred by the grantee of the amount required to settle at minimum cost any or all of the requirements or conditions imposed by or pursuant to these regulations or the Washington Clean Air Act.

The department may authorize payment of the state's share of the amount required to settle at minimum cost any contractual obligations properly incurred by the grantee prior to the date of termination, if the department finds that the grantee acted in good faith in incurring the obligations.

[Statutory Authority: Chapter 70.94 RCW. 87–19–077 (Order 87–16), § 173–450–080, filed 9/16/87.]

WAC 173–450–100 Federal grants. The standards and requirements of these regulations establishing the eligibility of air authorities for state financial aid shall be equally applicable to the applications of such air authorities for federal grants.

[Statutory Authority: Chapter 70.94 RCW. 87–19–077 (Order 87–16), § 173–450–100, filed 9/16/87.]

Chapter 173–470 WAC

AMBIENT AIR QUALITY STANDARDS FOR PARTICULATE MATTER
(Formerly chapter 18–40 WAC)

WAC
173–470–010 Purpose.
173–470–100 Ambient air quality standards.
173–470–110 Particle fallout standards.
173–470–160 Reporting of data.

WAC 173–470–010 Purpose. This chapter promulgated under RCW 70.94.305 and 70.94.331 establishes maximum acceptable levels for particulate matter in the ambient air. Particulate matter is characterized in criteria developed by the United States Environmental Protection Agency.

[Statutory Authority: Chapter 70.94 RCW. 87–19–080 (Order 87–19), § 173–470–010, filed 9/16/87.]

WAC 173–470–020 Applicability. The provisions of this chapter apply to all areas of the state of Washington.

[Statutory Authority: Chapter 70.94 RCW. 87–19–080 (Order 87–19), § 173–470–020, filed 9/16/87.]

WAC 173–470–030 Definitions. Unless a different meaning is clearly required by context, words and phrases used in this chapter shall have the following meanings; general terms common with other chapters of Title 173 WAC as defined in chapter 173–403 WAC, and terms specific to standards for particulates as follows:

(1) "Particulate matter" means any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than a few hundred microns.

(2) "Total suspended particulates" means airborne particulate matter, collected on eight by ten inch sheets of flash-fired glass fiber filter web of specified collection efficiency, using a high–volume air sampler or an equivalent collection system.

[Statutory Authority: Chapter 70.94 RCW. 87–19–080 (Order 87–19), § 173–470–030, filed 9/16/87.]

WAC 173–470–100 Ambient air quality standards. Particulate matter in the ambient air as measured shall not exceed the values listed below:

(1) The total suspended particulate concentration measured at any primary air monitoring station shall not exceed:

(a) Sixty micrograms per cubic meter (60 µg/m³) of air as an annual geometric mean.

(b) One hundred fifty micrograms per cubic meter (150 µg/m³) of air as a maximum twenty–four–hour concentration more than once per year.

(2) In recognition of natural dust in areas of the state, east of the Cascade range crest the concentration of particulate matter measured by a primary air mass station (PAMS) is reduced by the concentration measured at approved background locations as follows:

(a) When background concentrations are greater than thirty micrograms per cubic meter (30 µg/m³) of air on individual sampling days, the PAMS's concentration less background shall not be greater than one hundred twenty micrograms per cubic meter (120 µg/m³) of air for any twenty–four–hour period more than once per year.

(b) When background concentrations are greater than twenty micrograms per cubic meter (20 µg/m³) of air as an annual geometric mean, the PAMS's concentration less background shall not be greater than forty micrograms per cubic meter (40 µg/m³) of air as an annual geometric mean.

[Statutory Authority: Chapter 70.94 RCW. 87–19–080 (Order 87–19), § 173–470–100, filed 9/16/87.]

WAC 173–470–110 Particle fallout standards. Particle fallout shall not exceed the standards enumerated below at the conditions stated.

(1) The particle fallout rate measured at a primary air mass station, ground level monitoring station or special station shall not exceed:

(a) Ten grams per square meter (10 g/m²) per month in an industrial area; or

(b) Five grams per square meter (5 g/m²) per month in a non–industrial area if visual observations show a presence of wood waste and the volatile fraction of the sample exceeds seventy percent.

(c) Five grams per square meter (5 g/m²) per month in residential and commercial areas.

(d) Three and one–half grams per square meter (3.5 g/m²) per month in residential and commercial areas if visual observations show the presence of wood waste and
the volatile fraction of the sample exceeds seventy percent.

(2) In recognition of natural dust in areas of the state, the following exceptions apply to areas east of the Cascade range crest. When concentrations measured at approved background locations exceed three and one-half grams per square meter (3.5 g/m²) per month, the particle fallout rate measured at a primary air mass station, ground level monitoring station or special station, shall not exceed:

(a) Six and one-half grams per square meter (6.5 g/m²) per month plus background in an industrial area; or
(b) One and one-half grams per square meter (1.5 g/m²) per month plus background in residential and commercial areas.

The provisions of WAC 173-470-110 (1)(b) and (d) pertaining to wood waste shall continue to apply regardless of background.

[Statutory Authority: Chapter 70.94 RCW. 87-19-080 (Order 87-19), § 173-470-110, filed 9/16/87.]

**WAC 173-470-150 Method of measurement.** Sampling and analysis for particulate matter shall be conducted according to methods approved by and on file with the department. Methods equivalent in sensitivity, accuracy, reproducibility, and selectivity to the approved standard method may be used after approval by the department.

[Statutory Authority: Chapter 70.94 RCW. 87-19-080 (Order 87-19), § 173-470-150, filed 9/16/87.]

**WAC 173-470-160 Reporting of data.** (1) Air authorities sampling for particulate matter shall notify the department of all infractions of these standards. Notification shall be made quarterly. A quarterly summary of all samples greater than the standards shall be submitted within sixty days of the end of each calendar quarter. Quarterly data shall include:

(a) Location of sampler.
(b) Time period (day and year).
(c) Individual concentrations recorded at each air monitoring station.
(d) The applicable geometric or arithmetic mean for each monitoring station (first quarter report only for previous calendar year).

(2) If particulate matter values greater than the standards are measured by the department, the air authority shall be notified quarterly. This notification shall include:

(a) Location.
(b) Time or time period.
(c) Concentrations recorded.
(d) The applicable geometric or arithmetic mean (first quarter report only for previous calendar year).

[Statutory Authority: Chapter 70.94 RCW. 87-19-080 (Order 87-19), § 173-470-160, filed 9/16/87.]
WAC 173-474-150 Measurement method. For determining compliance with this regulation, sulfur oxides shall be measured by methods approved by, and on file with, the department. Other methods equivalent in sensitivity, accuracy, reproducibility, and selectivity to the approved methods may be used after approval by the department.

WAC 173-474-160 Data reporting. (1) Air authorities sampling for sulfur oxides shall notify the department of all violations of these standards. The notification shall be submitted quarterly. Summaries shall provide the following information:
(a) Location of sampler.
(b) Time period (hours, days, and year).
(c) Actual concentrations recorded that exceeded the standard.
(2) The department will give quarterly notice to an air authority of infractions of the standards within its jurisdiction. This notice will include:
(a) Location.
(b) Time period and dates.
(c) Concentrations recorded.

WAC 173-481-100 Forage standards. (1) All sampling to determine compliance with these standards shall be conducted in locations and during time periods consistent with protecting livestock and vegetation.
(2) The fluoride content of forage calculated by dry weight shall not exceed:
(a) Forty parts per million fluoride ion (40 ppm F⁻) average for any twelve consecutive months.
(b) Sixty parts per million fluoride ion (60 ppm F⁻) each month for more than two consecutive months.
(c) Eighty parts per million fluoride ion (80 ppm F⁻) more than once in any two consecutive months.
(3) In areas where cattle are not grazed continually, but are fed cured forage part of the year, the fluoride content of the cured forage shall be used as the forage fluoride content for as many months as it is fed to establish the yearly average.
(4) Cured forage grown for sale as livestock feed shall not exceed forty parts per million fluoride ion (40 ppm F⁻) by dry weight after curing or preparing for sale.

Chapter 173-481 WAC

AMBIENT AIR QUALITY AND ENVIRONMENTAL STANDARDS FOR FLUORIDES
(Formerly chapter 18-48 WAC)

WAC
173-481-010 Purpose.
173-481-020 Applicability.
173-481-030 Definitions.
173-481-100 Forage standards.
173-481-110 Ambient standards.
173-481-150 Compliance with standards.
173-481-160 Sampling and analysis.

WAC 173-481-010 Purpose. This chapter promulgated under RCW 70.94.305 and 70.94.331 establishes fluoride standards for the protection of livestock and vegetation. Standards address the fluoride content of forage and gaseous fluorides in the ambient air.

WAC 173-481-020 Applicability. The provisions of this chapter apply to all areas of the state of Washington.

WAC 173-481-030 Definitions. Unless a different meaning is clearly required by context, words and phrases used in this chapter shall have the following meanings; general terms common with other chapters of Title 173 WAC as defined in chapter 173-403 WAC, and terms specific to standards for fluorides as defined below:
(1) "Forage" means grasses, pasture and other vegetation that is consumed or is intended to be consumed by livestock.
(2) "Cured forage" means hay, straw, ensilage that is consumed or is intended to be consumed by livestock.

WAC 173-481-110 Ambient standards. (1) All sampling to determine compliance with these standards shall be conducted in locations and during time periods consistent with protecting livestock and vegetation.
(2) Gaseous fluorides in the ambient air calculated as HF at standard conditions shall not exceed:
(a) Three and seven-tenths micrograms per cubic meter (3.7 µg/m³) average for any twelve consecutive hours;
(b) Two and nine-tenths micrograms per cubic meter (2.9 µg/m³) average for any twenty-four consecutive hours;
(c) One and seven-tenths micrograms per cubic meter (1.7 µg/m³) average for any seven consecutive days;
(d) Eighty-four one-hundredths micrograms per cubic meter (0.84 µg/m³) average for any thirty consecutive days;
(e) Five-tenths micrograms per cubic meter (0.5 µg/m³) average for the period March 1 through October 31 of any year.

WAC 173-481-150 Compliance with standards. When requested by the department, persons emitting fluorides to the ambient air shall demonstrate their
compliance with WAC 173-481-100 and 173-481-110 by conducting a monitoring program approved in writing by the department. All monitoring data shall be submitted to the department.

[Statutory Authority: Chapter 70.94 RCW. 87-19-073 (Order 87-21), § 173-481-150, filed 9/16/87.]

**WAC 173-481-160 Sampling and analysis.** Sampling and analysis shall be in accordance with techniques approved by and on file with the department. Other sampling and methods of analysis which are equivalent in accuracy, sensitivity, reproducibility and applicability under similar conditions may be used after approval by the department.

[Statutory Authority: Chapter 70.94 RCW. 87-19-073 (Order 87-21), § 173-481-160, filed 9/16/87.]

### Chapter 173-500 WAC

**WATER RESOURCES MANAGEMENT PROGRAM ESTABLISHED PURSUANT TO THE WATER RESOURCES ACT OF 1971**

WAC 173-500-010 Background. (1) The Water Resources Act of 1971 (chapter 90.54 RCW) sets forth fundamentals of water resource policy to insure that the waters of the state will be protected and fully utilized for the greatest benefit to the people of the state of Washington and, in relation thereto, to provide direction to the department of ecology and other state agencies and officials in carrying out water and related resource programs.

(2) The department was directed, through the adoption of appropriate rules, to develop and implement a comprehensive state water program which would provide a process for making decisions on future water resource allocations and uses.

(3) The act provides that the department of ecology may develop a water program in regional segments so that immediate attention may be given to waters of a give physio-economic region of the state or to specific critical problems of water allocation and use.

(4) The act further directed the department of ecology to modify existing regulations and adopt new regulations to insure that existing regulatory programs are in accord with the water resource policies of the act.

[Statutory Authority: Chapters 43.27A and 90.54 RCW. 88-13-037 (Order 88-11), § 173-500-010, filed 6/9/88.]

**WAC 173-500-030 Authority.** This regulation is promulgated by the department of ecology under the authority of chapter 90.54 RCW.

[Statutory Authority: Chapters 43.27A and 90.54 RCW. 88-13-037 (Order 88-11), § 173-500-030, filed 6/9/88; Order DE 75-23, § 173-500-030, filed 1/6/76.]

**WAC 173-500-070 Regulation review.** The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.27A and 90.54 RCW. 88-13-037 (Order 88-11), § 173-500-070, filed 6/9/88.]

### Chapter 173-501 WAC

**INSTREAM RESOURCES PROTECTION PROGRAM—NOOKSACK WATER RESOURCE INVENTORY AREA (WRIA) 1**


**WAC 173-501-090 Enforcement.** In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-501-090, filed 6/9/88; Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-090, filed 12/4/85.]

**WAC 173-501-095 Appeals.** All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-501-095, filed 6/9/88.]

**WAC 173-501-100 Regulation review.** The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-501-100, filed 6/9/88; Statutory Authority: RCW 90.54.020 (3)(a) and 90.54.040 (1) and (2). 85-24-073 (Order 85-19), § 173-501-100, filed 12/4/85.]

### Chapter 173-507 WAC

**INSTREAM RESOURCES PROTECTION PROGRAM—SNOHOMISH RIVER BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 7**


**WAC 173-507-020 Establishment of instream flows.** (1) Instream flows are established for stream...
management units with monitoring to take place at certain control stations as follows:

**STREAM MANAGEMENT UNIT INFORMATION**

<table>
<thead>
<tr>
<th>Control Station No.</th>
<th>Control Station by River Mile and Section, Township and Range</th>
<th>Affected Stream Reach Including Tributaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.1330.00</td>
<td>51.6 28-27-10E</td>
<td>From confluence with N. Fk. Skykomish River to headwaters.</td>
</tr>
<tr>
<td>12.1381.50</td>
<td>5.1 17-28-8E</td>
<td>From mouth to headwaters.</td>
</tr>
<tr>
<td>12.1411.00</td>
<td>25.0 12-27-6E</td>
<td>From mouth to headwaters, excluding So. Fk. Skykomish River and Sultan River.</td>
</tr>
<tr>
<td>12.1420.00</td>
<td>2.2 26-24-8E</td>
<td>From mouth to headwaters.</td>
</tr>
<tr>
<td>12.1445.00</td>
<td>40.0 19-24-8E</td>
<td>From Snoqualmie Falls to headwaters, excluding No. Fork Snoqualmie River.</td>
</tr>
<tr>
<td>12.1485.00</td>
<td>8.7 31-26-8E</td>
<td>From mouth to headwaters.</td>
</tr>
<tr>
<td>12.1490.00</td>
<td>23.0 9-25-7E</td>
<td>From confluence with Harris Creek to Snoqualmie Falls, excluding Tolt River.</td>
</tr>
<tr>
<td>12.1554.00</td>
<td>1.9 18-28-6E</td>
<td>From mouth to headwaters.</td>
</tr>
<tr>
<td>12.1580.00</td>
<td>20.4 16-27-6E</td>
<td>From influence of mean annual high tide at low base flow levels to confluence with Skykomish River and Snoqualmie River, excluding Pilchuck River.</td>
</tr>
<tr>
<td>12.1590.00</td>
<td>2.5 26-27-6E</td>
<td>From mouth to confluence with Harris Creek, including Harris Creek.</td>
</tr>
</tbody>
</table>

(2) Instream flows established for the stream management units in WAC 173-507-020(1) are as follows:

**INSTREAM FLOWS IN THE SNOHOMISH RIVER BASIN**
(in Cubic Feet per Second)

<table>
<thead>
<tr>
<th>Month Day</th>
<th>12.1330.00 So.Fk. Skykomish</th>
<th>12.1411.00 Skykomish</th>
<th>12.1430.00 No.Fk* Snoqualmie</th>
<th>12.1430.00 No.Fk** Snoqualmie</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>1 1250 4000 300 200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 1250 4900 300 200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>1 1250 4900 300 200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 1250 4900 300 200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>1 1250 3250 300 200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 950 2170 195 140</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug.</td>
<td>1 650 1450 130 100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 450 1000 130 100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept.</td>
<td>1 450 1000 130 100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 450 1000 130 100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct.</td>
<td>1 550 1300 130 130</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 700 1700 165 165</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov.</td>
<td>1 900 2200 210 200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 900 2200 260 200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec.</td>
<td>1 900 2200 260 200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 900 2200 260 200</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Normal year flows must be maintained at all times unless a critical condition is declared by the director. The director, or his designee, may authorize, in consultation with the state departments of fisheries and wildlife, a reduction in instream flows during a critical condition period. At no time are diversions subject to this regulation permitted for any reason when flows fall below the following critical year flows, except where a declaration of overriding considerations of public interest is made by the director.

**Critical year flows represent flows below which the department believes substantial damage to instream values will occur.**

<table>
<thead>
<tr>
<th>Month Day</th>
<th>12.1381.50 Sultan</th>
<th>12.1445.00 Snoqualmie</th>
<th>12.1485.50 Tolt River* Tolt River**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.</td>
<td>1 1550 280 190</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 1550 280 190</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb.</td>
<td>1 1550 280 190</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 1550 280 190</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar.</td>
<td>1 1550 280 190</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 1550 280 190</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr.</td>
<td>1 1550 280 190</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 1550 280 190</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>1 1550 280 190</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 1550 280 190</td>
<td></td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>1 1550 280 190</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 1550 280 190</td>
<td></td>
<td></td>
</tr>
<tr>
<td>July</td>
<td>1 1550 280 140</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 1100 240 120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug.</td>
<td>1 770 170 120</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 600 120 120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept.</td>
<td>1 600 120 120</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 600 120 120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct.</td>
<td>1 820 190 185</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 1100 280 190</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov.</td>
<td>1 1550 280 190</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 1550 280 190</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec.</td>
<td>1 1550 280 190</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15 1550 280 190</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Normal year flows must be maintained at all times unless a critical condition is declared by the director. The director, or his designee, may authorize, in consultation with the state departments of fisheries and wildlife, a reduction in instream flows during a critical condition period. At no time are diversions subject to this regulation permitted for any reason when flows fall below the following critical year flows, except where a declaration of overriding considerations of public interest is made by the director.*
**Critical year flows represent flows below which the department believes substantial damage to instream values will occur.**

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Snoqualmie (Carnation)</th>
<th>Snoqualmie</th>
<th>Pilchuck</th>
<th>Snohomish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.</td>
<td>1</td>
<td>2500</td>
<td>2800</td>
<td>300</td>
<td>6000</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>2500</td>
<td>2800</td>
<td>300</td>
<td>6000</td>
</tr>
<tr>
<td>Feb.</td>
<td>1</td>
<td>2500</td>
<td>2800</td>
<td>300</td>
<td>6000</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>2500</td>
<td>2800</td>
<td>300</td>
<td>6000</td>
</tr>
<tr>
<td>Mar.</td>
<td>1</td>
<td>2500</td>
<td>2800</td>
<td>300</td>
<td>6000</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>2500</td>
<td>2800</td>
<td>300</td>
<td>6000</td>
</tr>
<tr>
<td>Apr.</td>
<td>1</td>
<td>2500</td>
<td>2800</td>
<td>300</td>
<td>6000</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>2500</td>
<td>2800</td>
<td>300</td>
<td>6000</td>
</tr>
<tr>
<td>May</td>
<td>1</td>
<td>2500</td>
<td>2800</td>
<td>300</td>
<td>7200</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>2500</td>
<td>2800</td>
<td>300</td>
<td>8000</td>
</tr>
<tr>
<td>June</td>
<td>1</td>
<td>2500</td>
<td>2800</td>
<td>300</td>
<td>8000</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>2500</td>
<td>2800</td>
<td>300</td>
<td>8000</td>
</tr>
<tr>
<td>July</td>
<td>1</td>
<td>1850</td>
<td>2180</td>
<td>220</td>
<td>5700</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>1300</td>
<td>1550</td>
<td>160</td>
<td>4000</td>
</tr>
<tr>
<td>Aug.</td>
<td>1</td>
<td>950</td>
<td>1080</td>
<td>120</td>
<td>2800</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>700</td>
<td>800</td>
<td>85</td>
<td>2000</td>
</tr>
<tr>
<td>Sept.</td>
<td>1</td>
<td>700</td>
<td>800</td>
<td>85</td>
<td>2000</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>700</td>
<td>800</td>
<td>85</td>
<td>2000</td>
</tr>
<tr>
<td>Oct.</td>
<td>1</td>
<td>1050</td>
<td>1200</td>
<td>130</td>
<td>2900</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>1650</td>
<td>1650</td>
<td>200</td>
<td>4000</td>
</tr>
<tr>
<td>Nov.</td>
<td>1</td>
<td>2500</td>
<td>2800</td>
<td>300</td>
<td>6000</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>2500</td>
<td>2800</td>
<td>300</td>
<td>6000</td>
</tr>
<tr>
<td>Dec.</td>
<td>1</td>
<td>2500</td>
<td>2800</td>
<td>300</td>
<td>6000</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>2500</td>
<td>2800</td>
<td>300</td>
<td>6000</td>
</tr>
</tbody>
</table>

(3) Instream flow hydrographs, as represented in the document entitled "Snohomish River instream resource protection program," shall be used for definition of instream flows on those days not specifically identified in WAC 173–507–020(2).

(4) All consumptive water rights hereafter established shall be expressly subject to the instream flows established in WAC 173–507–020 (1) through (3).

(5) At such time as the departments of fisheries and/or wildlife and the department of ecology agree that additional stream management units should be defined, other than those specified in WAC 173–507–020(1), the department of ecology shall identify additional control stations and management units on streams and tributaries within the basin and shall set instream flows where possible for those stations as provided in chapters 90.22 and 90.54 RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88–13–037 (Order 88–11), § 173–507–075, filed 6/9/88.]

WAC 173–507–070 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43-21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88–13–037 (Order 88–11), § 173–507–075, filed 6/9/88.]

WAC 173–507–070 Future rights. No water rights to divert or store public surface waters of the Cedar–Sammamish basin WRIA 8 shall hereafter be granted which shall conflict with the instream flows and closures established in this chapter. Future rights for nonconsumptive uses may be granted under the provisions of this chapter.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88–13–037 (Order 88–11), § 173–507–075, filed 6/9/88.]

WAC 173–508–090 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88–13–037 (Order 88–11), § 173–508–090, filed 6/9/88.]

WAC 173–508–095 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43-21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88–13–037 (Order 88–11), § 173–508–095, filed 6/9/88.]

[1988 WAC Supp—page 583]
WAC 173-508-100 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.218, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-508-100, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 79-10-002 (Order DE 79-9), § 173-508-100, filed 9/6/79.]

Chapter 173-509 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—GREEN—DUWAMISH RIVER BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 9

WAC
173-509-030 Establishment of instream flows.
173-509-080 Enforcement.
173-509-085 Appeals.
173-509-090 Regulation review.

WAC 173-509-030 Establishment of instream flows. (1) Instream flows are established for stream management units with monitoring to take place at certain control stations as follows:

<table>
<thead>
<tr>
<th>Control Station No.</th>
<th>Control Station by River Mile and Section, Township and Range</th>
<th>Affected Stream Reach Including Tributaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.1130.00</td>
<td>32.0 near Auburn, WA</td>
<td>From influence of mean annual high tide at low instream flow levels (approximately River Mile 11.0) to USGS Gage #12.1067.000</td>
</tr>
<tr>
<td>12.1067.00</td>
<td>60.4 near Palmer, WA</td>
<td>From USGS Gage #12.1067.000 to headwaters.</td>
</tr>
</tbody>
</table>

The Palmer gage will be used to condition future water rights upstream from that gage. The Auburn gage will be used to condition future water right appropriations downstream from the Palmer gage. If it becomes necessary to change a control station location to improve measurement accuracy or management capability, the department shall do so under provisions in WAC 173-500-060(6).

(2) Instream flows established for the stream management units in WAC 173-509-030(1) are as follows:

(a) Future water right holders subject to regulation by the Palmer gage will not be allowed to continue diversions when flows fall below the normal year instream flows at the Palmer gage unless a critical condition is declared by the director. The director, or his designee, may authorize, in consultation with the state departments of fisheries and wildlife, a reduction in instream flows during a critical condition period. At no time will diversions subject to regulation by the Palmer gage be continued when flows fall below the critical year instream flows at Palmer. At no time will diversions subject to regulation by the Auburn gage be continued when flows fall below the normal year instream flows at Auburn. When a declaration of overriding considerations of public interest is made by the director, these requirements may be modified or waived. A declaration of overriding consideration because of drought conditions shall not be made when natural flows equal or exceed the one-in-fifty year low flow condition. The director shall consult with the directors of the state departments of wildlife and fisheries before making a declaration of overriding consideration. Any declaration of critical conditions or overriding considerations of public interest made by the director shall be communicated to all basin resource agencies, water purveyors, and local general purpose governments, and include the reason for such declaration and its expected duration.

(b) The director will consider declaring a critical period when:

(1) In the spring the basin runoff volume forecast of May 1 is not adequate to meet the sum of any rights which the city of Tacoma may have established through historical usage prior to the adoption of this regulation plus the normal year instream flows plus the volume required to replenish the conservation storage.
(2) In the summer and fall the sum of the reservoir inflows extrapolated from current observations plus the volume of water in storage at Howard A. Hanson Dam is not adequate to meet the sum of any rights which the city of Tacoma may have established through historical usage prior to the adoption of this regulation plus the normal year instream flows. Within five days the director will inform the major affected water right holders of the extent of the allowed deviation from the normal year instream flows. Once a deviation from normal year instream flows is allowed, the water resources shall be evaluated at least every 7 days to see if additional deviation is warranted. Before allowing deviation from the normal year instream flows, water conservation practices and use of other sources shall be considered.

(c) In addition to other necessary provisions, any diversion of the natural flow, including diversion to storage under future water rights shall cease (or be regulated to the extent necessary) when the flow at the applicable control station falls below (or is less than) the instream flows established by this regulation and made a condition of said future water right. Said future water rights are subject to the rights and authority of the Corps of Engineers to utilize for storage and conservation flows, the natural inflow to the Howard A. Hanson reservoir and to all other prior water right holders' authorized use of natural flows, including any rights that the city of Tacoma may have established through historical usage. The use of stored waters is not to be impaired, limited, or diminished by this regulation.

The department recognizes that from time to time the Corps of Engineers may establish a minimum reservoir level which is necessary to provide conservation flows with a high measure of assurance. When the reservoir falls below this level it may be necessary for the Corps of Engineers to replenish conservation storage. When this occurs, water rights subject to the provisions of this chapter may be temporarily regulated or diminished and the actual stream discharge diminished.

(3) Instream flows, as represented in Figure 1, shall be used for definition of instream flows on those days not specifically identified in WAC 173–509–030(2).

FIGURE 1 – PROPOSED INSTREAM FLOWS FOR FUTURE WATER RIGHTS IN THE GREEN–DUWAMISH RIVER BASIN

[1988 WAC Supp—page 585]
(4) All consumptive water rights hereafter established shall be expressly subject to the instream flows established in WAC 173-509-030 (1) through (3). However, nothing in this section shall prohibit the release or diversion of stored water or the use of any water course as a means for its conveyance in accordance with RCW 90.03.030.

WAC 173-509-080 Enforcement. In the enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

WAC 173-509-085 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

WAC 173-509-090 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions. The director shall initiate a review of the rules by appointing a committee of major affected water right holders, basin resource management interests, and governmental agencies.

Chapter 173-510 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—PUYALLUP RIVER BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 10

WAC
173-510-030 Establishment of instream flows.
173-510-090 Enforcement.
173-510-095 Appeals.
173-510-100 Regulation review.

WAC 173-510-030 Establishment of instream flows. (1) Stream management units and associated control stations are established as follows:

Stream Management Unit Information

<table>
<thead>
<tr>
<th>Control Station No.</th>
<th>Control Station by River Mile and Section, Township, and Range</th>
<th>Affect Stream Reach(es)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-0965.00</td>
<td>12.2 Confluence with Puyallup River to the headwaters including all tributaries</td>
<td></td>
</tr>
<tr>
<td>12-0957.00</td>
<td>0.1 From the confluence with the White River to the headwaters including all tributaries, excluding the Carbon River</td>
<td></td>
</tr>
<tr>
<td>12-1015.00</td>
<td>6.6 From the influence of mean annual high tide at low base flow levels to the confluence with the White River including all tributaries, excluding the White River</td>
<td></td>
</tr>
</tbody>
</table>

(2) Instream flows are established for the stream management units in WAC 173-510-030(1) as follows:

Instream Flows in the Puyallup River Basin

<table>
<thead>
<tr>
<th>Month Day</th>
<th>12-0965.00 (At Alderton)</th>
<th>12-1015.00 Puyallup River</th>
<th>12-0957.00 Carbon River</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>1 700 1400 600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feb</td>
<td>1 750 1400 550</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar</td>
<td>1 800 1500 550</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr</td>
<td>1 850 1700 550</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>1 950 2000 900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jun</td>
<td>1 1050 2000 900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jul</td>
<td>1 1050 2000 500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug</td>
<td>1 1050 2000 450</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep</td>
<td>1 1050 1750 400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct</td>
<td>1 1050 1500 350</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov</td>
<td>1 1050 1300 350</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec</td>
<td>1 1050 1100 350</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(3) Instream flow hydrographs, as represented in the document entitled "Puyallup River basin instream resource protection program," shall be used for definition of instream flows on those days not specifically identified in WAC 173-510-030(2).

(4) All consumptive water rights hereafter established shall be expressly, subject to instream flows established in WAC 173-510-030(1) through (3).

(5) At such time as the department of fisheries and/or department of wildlife and the department of ecology shall agree that additional stream management units should be identified other than those specified in WAC 173-510-030(1), the department of ecology shall identify additional control stations and management
units on streams and tributaries within the basin and shall further protect instream flows where possible for those stations as provided in chapters 90.22 and 90.54 RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 81-04-028 (Order DE 79-31), § 173-510-030, filed 3/21/80.]

WAC 173-510-090 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-510-090, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-04-047 (Order DE 79-31), § 173-510-030, filed 3/21/80.]

WAC 173-510-095 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43-21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-511-095, filed 6/9/88.]

WAC 173-511-100 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-511-100, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-04-028 (Order DE 80-42), § 173-511-100, filed 2/2/81.]

Chapter 173-511 WAC
INSTREAM RESOURCES PROTECTION PROGRAM—CHAMBERS–CLOVER CREEKS BASIN WATER RESOURCES INVENTORY AREA (WRIA) 12

WAC 173-511-095 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43-21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-511-095, filed 6/9/88.]

WAC 173-512-080 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-512-080, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 80-01-012 (Order 79-23), § 173-512-080, filed 12/12/79.]

[1988 WAC Supp—page 587]
Chapter 173-513 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—DESHUTES RIVER BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 13

WAC

173-513-090 Enforcement.
173-513-095 Appeals.
173-513-100 Regulation review.

WAC 173-513-090 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-513-090, filed 6/9/88. Statutory Authority: Chapters 90.22 and 90.54 RCW. 81-16-003 (Order DE 83-34), § 173-513-090, filed 6/24/80.]

WAC 173-513-095 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-514-090, filed 6/9/88. Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 84-04-014 (Order DE 83-34), § 173-514-090, filed 1/23/84.]

Chapter 173-514 WAC

INSTREAM RESOURCES PROTECTION PROGRAM—KENNEDY-GOLDSBOROUGH WATER RESOURCE INVENTORY AREA (WRIA) 14

WAC

173-514-080 Enforcement.
173-514-085 Appeals.
173-514-090 Regulation review.

WAC 173-514-080 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-514-080, filed 6/9/88. Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 84-04-014 (Order DE 83-34), § 173-514-080, filed 1/23/84.]

[1988 WAC Supp--page 588]
Chehalis River Basin—WRIA’s 22 And 23

WATER RESOURCES PROGRAM IN THE
CHEHALIS RIVER BASIN, WRIA-22 AND 23

WAC
173-522-020 Establishment of base flows.
173-522-070 Enforcement.
173-522-080 Appeals.
173-522-090 Regulation review.

WAC 173-522-020 Establishment of base flows. (1)
Base flows are established for stream management units with monitoring to take place at certain control stations as follows:

<table>
<thead>
<tr>
<th>Control Station No.</th>
<th>Control Station by River Mile and Section, Township and Range</th>
<th>Affected Stream Reach Including Tributaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.0200.00</td>
<td>Chehalis River Conf. w/Elk Creek 14-13-5W</td>
<td>From confluence with Elk Creek to headwaters except Elk Cr.</td>
</tr>
<tr>
<td>12.0205.00</td>
<td>Elk Creek 16-13-5W</td>
<td>From confluence with Chehalis River to headwaters.</td>
</tr>
<tr>
<td>12.0216.30</td>
<td>So. Fork Chehalis R. 24-13-4W</td>
<td>From mouth to headwaters.</td>
</tr>
<tr>
<td>12.0235.00</td>
<td>Chehalis River 77.6</td>
<td>From confluence with Newaukum River to confluence with Elk Cr., excluding Elk Creek, and Newaukum Rivers.</td>
</tr>
<tr>
<td>12.0240.00</td>
<td>S. Fork Newaukum R. 28-13-1E</td>
<td>From confluence with Lost Creek to headwaters, excluding Lost Creek.</td>
</tr>
<tr>
<td>12.0245.00</td>
<td>N. Fork Newaukum River 35-14-1W</td>
<td>From mouth to headwaters.</td>
</tr>
<tr>
<td>12.0250.00</td>
<td>Newaukum River 4.1</td>
<td>From mouth to confluence with Lost Cr. on S. Fork Newaukum River, excluding N. Fork Newaukum River.</td>
</tr>
<tr>
<td>12.0253.00</td>
<td>Salzer Creek 22-14-2W</td>
<td>From mouth to headwaters.</td>
</tr>
<tr>
<td>12.0264.00</td>
<td>Skookumchuck River 12-15-2W</td>
<td>From mouth to headwaters.</td>
</tr>
<tr>
<td>12.0275.00</td>
<td>Chehalis River at Grand Mound 22-15-3W</td>
<td>From confluence with Newaukum River to confluence with Prairie Creek.</td>
</tr>
<tr>
<td>12.0292.00</td>
<td>Black River 33-16-4W</td>
<td>From mouth to headwaters.</td>
</tr>
<tr>
<td>12.0305.00</td>
<td>Cedar Creek 14-16-5W</td>
<td>From mouth to headwaters.</td>
</tr>
<tr>
<td>12.0309.00</td>
<td>Porter Creek 22-17-5W</td>
<td>From mouth to headwaters.</td>
</tr>
</tbody>
</table>

[1988 WAC Supp—page 589]
(2) Base flows established for the stream management units in WAC 173-522-020(1) are as follows:

**BASE FLOWS IN THE CHEHALIS RIVER BASIN**

(In Cubic Feet per Second)

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>12.0200</th>
<th>12.0205</th>
<th>12.0216</th>
<th>12.0235</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Chehalis R.</td>
<td>Elk Cr.</td>
<td>So. Fk.</td>
<td>Chehalis R.</td>
</tr>
<tr>
<td>Jan.</td>
<td>1</td>
<td>260</td>
<td>100</td>
<td>200</td>
<td>700</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>260</td>
<td>100</td>
<td>200</td>
<td>700</td>
</tr>
<tr>
<td>Feb.</td>
<td>1</td>
<td>260</td>
<td>100</td>
<td>200</td>
<td>700</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>260</td>
<td>100</td>
<td>200</td>
<td>700</td>
</tr>
<tr>
<td>Mar.</td>
<td>1</td>
<td>260</td>
<td>100</td>
<td>200</td>
<td>700</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>260</td>
<td>100</td>
<td>200</td>
<td>700</td>
</tr>
<tr>
<td>Apr.</td>
<td>1</td>
<td>260</td>
<td>100</td>
<td>200</td>
<td>700</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>260</td>
<td>100</td>
<td>200</td>
<td>700</td>
</tr>
<tr>
<td>May</td>
<td>1</td>
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</tr>
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<td></td>
<td>15</td>
<td>146</td>
<td>57</td>
<td>105</td>
<td>400</td>
</tr>
<tr>
<td>June</td>
<td>1</td>
<td>108</td>
<td>43</td>
<td>75</td>
<td>300</td>
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<td>40</td>
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<td>15</td>
<td>46</td>
<td>19</td>
<td>29</td>
<td>130</td>
</tr>
<tr>
<td>Aug.</td>
<td>1</td>
<td>37</td>
<td>16</td>
<td>21</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>31</td>
<td>14</td>
<td>15</td>
<td>75</td>
</tr>
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<td>Sep.</td>
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<td>15</td>
<td>75</td>
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<td>15</td>
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<td>1</td>
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<td>15</td>
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<td>15</td>
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<td>17</td>
<td>28</td>
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<tr>
<td>Nov.</td>
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<td>31</td>
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<tr>
<td>Dec.</td>
<td>1</td>
<td>260</td>
<td>100</td>
<td>200</td>
<td>700</td>
</tr>
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<td>100</td>
<td>200</td>
<td>700</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>12.0240</th>
<th>12.0245</th>
<th>12.0250</th>
<th>12.0253</th>
</tr>
</thead>
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<tr>
<td></td>
<td></td>
<td>Newaukum R.</td>
<td>Newaukum R.</td>
<td>Newaukum R.</td>
<td>Salzer Cr.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S. Fork</td>
<td>N. Fork</td>
<td>Satsop R.</td>
<td>Salzer Cr.</td>
</tr>
<tr>
<td>Jan.</td>
<td>1</td>
<td>125</td>
<td>62</td>
<td>250</td>
<td>11</td>
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<td>125</td>
<td>62</td>
<td>250</td>
<td>11</td>
</tr>
<tr>
<td>Feb.</td>
<td>1</td>
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<td>62</td>
<td>250</td>
<td>11</td>
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<td>62</td>
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<td>11</td>
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<td>Mar.</td>
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<td>11</td>
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<td>11</td>
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<td>.10</td>
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<td>.05</td>
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[1988 WAC Supp—page 590]
### Chehalis River Basin—WRIA's 22 And 23

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
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<th>Hoquiam R.</th>
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<td>May</td>
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### Hoquiam R. E. Fk.

<table>
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<td>June</td>
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</table>

(3) Base flow hydrographs, Appendix 1, pages 19–23 in the document entitled "water resources management program in the Chehalis River basin" dated November, 1975 shall be used for definition of base flows on those days not specifically identified in WAC 173–522–020(2).

(4) All rights hereafter established shall be expressly subject to the base flows established in WAC 173–522–020 (1) through (3).

(5) At such time as the departments of fisheries and/or wildlife provide specific information substantiating the need for flows higher than the flows set forth in WAC 173–522–020(2), the department of ecology agrees to proceed with setting minimum flows as provided under chapter 90.22 RCW within one year from the time of said request, unless agreement to another time frame is reached between parties.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-522-070, filed 6/9/88.]

### WAC 173–522–070 Enforcement

In enforcement of this chapter, the department of ecology may impose such sanctions as are appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88–13–037 (Order 88–11), § 173–522–070, filed 6/9/88.]

### WAC 173–522–080 Appeals

All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43-21B RCW.

[1988 WAC Supp—page 591]
WAC 173-522-090 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-522-090, filed 6/9/88.]

WAC 173-532-090 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as are appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-532-090, filed 6/9/88.]

WAC 173-532-100 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-532-100, filed 6/9/88.]

Chapter 173-532 WAC
WATER RESOURCES PROGRAM FOR THE WALLA WALLA RIVER BASIN, WRIA 32

WAC 173-532-090 Enforcement.
173-532-100 Appeals.
173-532-110 Regulation review.

WAC 173-532-090 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as are appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-532-090, filed 6/9/88.]

WAC 173-532-100 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-532-100, filed 6/9/88.]

Chapter 173-545 WAC
INSTREAM RESOURCES PROTECTION PROGRAM—WENATCHEE RIVER BASIN, WATER RESOURCE INVENTORY AREA (WRIA) 45

WAC 173-545-090 Enforcement.
173-545-095 Appeals.
173-545-100 Regulation review.
WAC 173-545-090 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-545-090, filed 6/9/88. Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-090, filed 6/3/83.]

WAC 173-545-095 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-545-095, filed 6/9/88.]

WAC 173-545-100 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-545-100, filed 6/9/88. Statutory Authority: Chapters 90.54, 90.22 and 75.20 RCW. 83-13-016 (Order DE 83-8), § 173-545-100, filed 6/3/83.]

Chapter 173-548 WAC
WATER RESOURCES PROGRAM IN THE METHOW RIVER BASIN, WRIA 48

WAC
173-548-080 Enforcement.
173-548-090 Appeals.
173-548-100 Regulation review.

WAC 173-548-080 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as are appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-548-080, filed 6/9/88.]

WAC 173-548-090 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-548-090, filed 6/9/88.]

WAC 173-548-100 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-548-100, filed 6/9/88.]

Chapter 173-549 WAC
WATER RESOURCES PROGRAM IN THE OKANOGAN RIVER BASIN, WRIA 49

WAC
173-549-090 Enforcement.
173-549-095 Appeals.
173-549-100 Regulation review.

WAC 173-549-090 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-549-090, filed 6/9/88. Statutory Authority: Chapters 90.54 and 90.22 RCW. 84-13-076 (Order DE 84-15), § 173-549-090, filed 6/20/84.]

WAC 173-549-095 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-549-095, filed 6/9/88.]

WAC 173-549-100 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-549-100, filed 6/20/84.]

Chapter 173-555 WAC
WATER RESOURCES PROGRAM IN THE LITTLE SPOKANE RIVER BASIN, WRIA 55

WAC
173-555-080 Enforcement.
173-555-090 Appeals.
173-555-100 Regulation review.

WAC 173-555-080 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as are appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-555-080, filed 6/9/88.]

WAC 173-555-095 Appeals. All final written decisions of the department of ecology pertaining to permits,
regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43-21B RCW.

[WAC 173-555-100 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-555-100, filed 6/9/88.]

WAC 173-555-080 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as are appropriate under authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.

[WAC 173-555-090 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43-21B RCW.

Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-555-090, filed 6/9/88.]

WAC 173-559-090 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-559-100, filed 6/9/88.]

Chapter 173-563 WAC INSTREAM RESOURCES PROTECTION PROGRAM FOR THE MAIN STEM COLUMBIA RIVER IN WASHINGTON STATE

WAC 173-563-050 Critical flow adjustment to, and waivers of, minimum instantaneous and average weekly flows.

173-563-070 Enforcement.

173-563-075 Regulation review.

173-563-080 Overriding considerations.

WAC 173-563-070 Enforcement. In enforcement of this chapter, the department of ecology may impose such sanctions as appropriate under the authorities vested in it, including but not limited to the issuance of regulatory orders under RCW 43.27A.190 and civil penalties under RCW 90.03.600.
WAC 173-563-075 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

WAC 173-563-080 Overriding considerations. Future authorizations for the use of water which would conflict with the provisions of this chapter shall be authorized by the director only in those situations when it is clear that overriding considerations of the public interest will be served. Such decisions shall be made in consultation with the directors of the Washington state department of fisheries, the Washington state department of wildlife, the Washington state department of agriculture, and the Washington state commissioner of public lands.

Consideration of the public interest by the director of the department of ecology shall include an evaluation of all uses of the river and its impact on the state of Washington. The uses to be considered include, but are not limited to, uses of water for domestic, stock watering, industrial, commercial, agricultural, irrigation, hydroelectric power production, mining, fish and wildlife maintenance and enhancement, recreational, thermal power production, and preservation of environmental and aesthetic values and all other uses compatible with the enjoyment of the public waters of the state.

WAC 173-563-090 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

WAC 173-563-090 Notice. Upon receipt of a proper petition, the director shall publish notice thereof in a newspaper or newspapers of general circulation in the county or counties in which the storage, diversion, and use is to be made, once a week for two consecutive weeks.

The director shall send notice thereof to the secretary, department of social and health services, and to the directors of the departments of fisheries and wildlife for the purpose of soliciting their comments.

WAC 173-590-110 Reservation. Upon review of a petition for reservation, related data and the results from the departmental investigation, the director shall notify the petitioner of action pertaining to the petition, to withdraw affected waters under RCW 90.54.050(2), or to reserve water(s). If reservation is deemed appropriate, the director shall take action to adopt a regulation or amend an existing regulation established pursuant to chapter 173-500 WAC to reserve water for a future public water supply for the general geographic area described in the petition or for a general area the director determines appropriate. (RCW 90.54.050 mandates the department to conduct a public hearing, prior to adoption of a rule to withdraw or to reserve in each county in which waters relating to the rule are located.)

The amount of the reservation shall be determined by the director and may be more or less than the amount requested in the petition. The total reservation amount may be prorated to specific subareas of service in the proposed development area. Appropriate map may be appended to regulation.

WAC 173-590-140 Reservation subject to review and change. From time to time, any reservation established under this chapter shall be reviewed and, when it appears appropriate to the department in implementing RCW 90.54.050, modified. No change shall be made without consultation of interested parties. The water resource program and the coordinated water system plan shall be reviewed whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

WAC 173-590-180 Appeal. The procedures hereof relate solely to rule-making activity of the department and are designed to obtain information to assist the department in determining when waters should be reserved as provided in RCW 90.54.050. Actions conducted under this chapter do not relate to contested cases within the meaning of the Administrative Procedure Act, chapter 34.04 RCW.

[1988 WAC Supp—page 595]
[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-590-180, filed 6/9/88; Order DE 75-32, § 173-590-180, filed 3/10/76.]

WAC 173-590-190 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-590-190, filed 6/9/88.]

Chapter 173-591 WAC
RESERVATION OF FUTURE PUBLIC WATER SUPPLY FOR THURSTON COUNTY

WAC 173-591-060 Petition received—Notice. A petition requesting the reservation of ground waters in Thurston County pursuant to chapter 173-590 WAC, and a coordinated water system plan approved by the secretary of the department of social and health services were received and accepted by the department. Notice of the receipt of proper petition was published in a newspaper of general circulation in Thurston County for two consecutive weeks, and the director sent notice thereof to the directors of the departments of fisheries, wildlife, and social and health services for the purpose of soliciting their comments.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-591-060, filed 6/9/88. Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-060, filed 7/14/86.]

WAC 173-591-070 Reservation. (1) The department, having received a final environmental impact statement dated January 16, 1985, and having conducted an investigation of the surrounding impacts of the proposed reservation and having heard comments solicited through the notice of receipt of petition and having found ground waters to be generally available for the purposes of the reservation and that the proposed use of the ground waters will result in the maximum net benefit for the people of the state, does hereby reserve portions of those ground waters for future public water supplies in Thurston County.

(2) The department finds that to provide peaking capacity on a daily basis the appropriate amount of the reservation shall be 40,589 gallons per minute, limited to a maximum annual withdrawal of 22,931 acre-feet/year, provided that the total annual withdrawal and diversion from all sources shall not exceed 48,225 acre-feet/year. This is intended to serve the estimated population of 288,092 in fifty years. The amount of this reservation shall be reviewed by the department whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

(3) A map showing the reservation area boundary is shown in Figure II-1 of the coordinated water system plan for Thurston County, dated May 1982, as approved by the department of social and health services for the purposes of reserving water for future public water supply purposes, and shown as the reservation area boundary map in WAC 173-591-130, Illus. 1.

(4) Due to the nature of the geographic distribution of the ground waters to be reserved and the development patterns that are anticipated in Thurston County, the reserved ground waters are intended to be beneficially utilized from the unconsolidated materials overlying bedrock, and are prorated to the subareas designated in Figure V-1 of the coordinated water system plan for Thurston County, dated May 1982, as approved by the department of social and health services for the purpose of reserving water for future public water supply purposes, and shown as the reservation source of supply subareas map in WAC 173-591-130, Illus. 2. The reserved ground waters are generally prorated to the reservation source of supply subareas as follows, with the totaled reserved quantity to be obtained from within the boundary area.

<table>
<thead>
<tr>
<th>Source Location</th>
<th>Reservation Quantities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Instantaneous (GPM)</td>
</tr>
<tr>
<td>Airport</td>
<td>2,500</td>
</tr>
<tr>
<td>Allison Springs</td>
<td>2,000</td>
</tr>
<tr>
<td>Black Lake</td>
<td>2,000</td>
</tr>
<tr>
<td>Deschutes Valley</td>
<td>1,969</td>
</tr>
<tr>
<td>Hawks Prairie</td>
<td>7,000</td>
</tr>
<tr>
<td>McAllister Springs</td>
<td>2,000</td>
</tr>
<tr>
<td>Mottman Indust. Park</td>
<td>2,000</td>
</tr>
<tr>
<td>Southeast</td>
<td>14,426</td>
</tr>
<tr>
<td>Total</td>
<td>40,589</td>
</tr>
</tbody>
</table>

(5) The priority date of any permit issued pursuant to RCW 90.03.290 and 90.44.070 which authorizes withdrawal and use of public water for public water supply pursuant to the reservation provided in subsection (2) of this section shall be the effective date of this regulation.

(6) A record of all ground water permits issued pursuant to the reservation provided in subsection (2) of this section shall be maintained by the department in a manner that will readily show the quantities that have been allocated from the reserved ground waters for each subarea identified in subsection (4) of this section and the quantities of unappropriated ground waters that may remain in the reserved status available for appropriation.

(7) No permit issued as described in subsection (5) of this section shall authorize a withdrawal that causes a lowering of the water levels below a reasonable or feasible pumping lift in any withdrawal facilities of a senior ground water right holder.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-591-070, filed 6/9/88. Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-070, filed 7/14/86.]

[1988 WAC Supp—page 596]
WAC 173-591-115 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-591-115, filed 6/9/88.]

WAC 173-591-120 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-591-120, filed 6/9/88. Statutory Authority: RCW 90.54.050(1). 86-15-029 (Order DE-86-16), § 173-591-120, filed 7/14/86.]

Chapter 173-592 WAC

RESERVATION OF FUTURE PUBLIC WATER SUPPLY FOR CLARK COUNTY

WAC 173-592-060 Petition received—Notice.
  173-592-070 Reservation.
  173-592-110 Regulation review.
  173-592-115 Appeals.

WAC 173-592-060 Petition received—Notice. A revised petition, dated August 12, 1985, requesting the reservation of ground waters in Clark County pursuant to chapter 173-590 WAC, and a coordinated water system plan approved by the secretary of the department of social and health services, dated March, 1983, were received and accepted by the department. Notice of the receipt of proper petition was published in a newspaper of general circulation in Clark County for two consecutive weeks, and the director sent notice thereof to the directors of the departments of fisheries, wildlife, and social and health services for the purpose of soliciting their comments.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-592-060, filed 6/9/88. Statutory Authority: RCW 90.54.050(1). 86-15-030 (Order DE-86-17), § 173-592-060, filed 7/14/86.]

WAC 173-592-070 Reservation. (1) The department, having heard comments solicited through the notice of receipt of petition and having reviewed a final declaration of nonsignificance under the authority of WAC 197-11-340 (State Environmental Policy Act) and having found ground waters to be generally available for the purposes of the reservation and that the proposed use of the ground waters will result in the maximum net benefit for the people of the state, does hereby reserve portions of those ground waters for future public water supplies in Clark County.

(2) The department finds that the appropriate amount of the reservation shall be 97,000 gallons per minute and 65,300 acre-feet/year. This is intended to serve the estimated population of 629,200 in fifty years. The amount of this reservation shall be reviewed by the department in consultation with local government whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

(3) A map showing the reservation source of supply boundaries is shown in Attachment 1A of the revised petition, dated August 12, 1985, requesting reservation of ground water in Clark County for future public water supplies. The map showing the reservation source of supply area boundary is incorporated in this regulation in WAC 173-592-120, Illus. 1.

(4) Waters reserved herein may be utilized within the geographical boundaries of Clark County consistent with the department of social and health services approved coordinated water system plan, dated March 1983.

(5) Due to the nature of the geographic distribution of the ground waters to be reserved in Clark County, the reserved ground waters are intended to be beneficially utilized from the following aquifers, as identified in Attachment 1A of the revised petition, dated August 12, 1985:

A Columbia River Alluvium
B-2B Upper Troutdale
C Sandy River Mudstone

(6) The priority date of any permit issued pursuant to RCW 90.03.290 and 90.44.060 which authorizes withdrawal and use of public water for public water supply pursuant to the reservation provided in subsection (2) of this section shall be the effective date of this regulation.

(7) A record of all ground water permits issued pursuant to the reservation provided in subsection (2) of this section shall be maintained by the department in a manner that will readily show the quantities that have been allocated from the reserved ground waters, and the quantities of unappropriated ground waters that may remain in the reserved status available for appropriation.

(8) No permit issued as described in subsection (6) of this section shall authorize a withdrawal that causes a lowering of the water levels below a reasonable or feasible pumping lift in any withdrawal facilities of a senior ground water right holder.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-592-070, filed 6/9/88. Statutory Authority: RCW 90.54.050(1). 86-15-030 (Order DE-86-17), § 173-592-070, filed 7/14/86.]

WAC 173-592-110 Regulation review. The department of ecology shall initiate a review of the rules established in this chapter whenever new information, changing conditions, or statutory modifications make it necessary to consider revisions.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-592-110, filed 6/9/88. Statutory Authority: RCW 90.54.050(1). 86-15-030 (Order DE-86-17), § 173-592-110, filed 7/14/86.]

WAC 173-592-115 Appeals. All final written decisions of the department of ecology pertaining to permits, regulatory orders, and related decisions made pursuant to this chapter shall be subject to review by the pollution
control hearings board in accordance with chapter 43.21B RCW.

[Statutory Authority: Chapters 43.21B, 43.27A, 90.22 and 90.54 RCW. 88-13-037 (Order 88-11), § 173-592-115, filed 6/9/88.]

Chapter 173-596 WAC
PROCEDURES AND POLICIES GOVERNING APPROPRIATIONS OF SIGNIFICANT AMOUNTS OF WATER FOR AGRICULTURAL IRRIGATION USE

WAC 173-596-010 through 173-596-065 Repealed.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

173-596-010 Background. [Order DE 76-19, § 173-596-010, filed 6/8/76.] Repealed by 88-13-037 (Order 88-11), filed 6/9/88. Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW.


173-596-025 Conditions to be included in permits involving substantial withdrawals of public waters. [Order DE 76-19, § 173-596-025, filed 6/8/76.] Repealed by 88-13-037 (Order 88-11), filed 6/9/88. Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW.

173-596-030 Regional water supply and multipurpose project considerations. [Order DE 76-19, § 173-596-030, filed 6/8/76.] Repealed by 88-13-037 (Order 88-11), filed 6/9/88. Statutory Authority: Chapters 43.27A, 90.22 and 90.54 RCW.


WAC 173-596-010 through 173-596-065 Repealed.

See Disposition Table at beginning of this chapter.

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